

Service
Service
Service37MF437B/37
42MF437B/37
47MF437B/37
42PFL5432D/37
47PFL5422D/37H_16651_000.eps
211107

Service Manual

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1. Technical Specifications,Connections,and Chassis Overview

Index of this chapter:

- 1.1 Technical Specifications
- 1.2 Connections
- 1.3 Chassis Overview

Notes:

Figures below can deviate slightly from the actual situation,
due to the different set executions.
Specifications are indicative (subject to change)

1.1 Technical Specifications

1.1.1 Technical Specifications

TypeI	: LCD
Active Area	: 819.36mm (H) X 460.89mm (V) (37.01" diagonal)
Outline Dimension	: 877.0mm (H) X 516.8mm (V) X 55.5mm (D)
Pixel Pitch	: 0.42675mm(H) X 0.42675mm(V)
Pixel Format	: 1920 X 1080 (WUXGA), RGB strip arrangement
Color Depth	: 8-bit, 16.7M colors
Luminance	: 500 cd/m ² (Typ)
Backlight	: 20 EEFL
Response Time	: 8msec.(typ.)
Viewing Angle	: 178/178 (L/R,U/D) (CR > 10)
Contrast Ratio	: 800:1(typ.)
EEFL MTBF	: 50,000 hrs (min.)
Supported video formats:	720 x 480 @60i
	720 x 240 @60p
	720 x 480 @60i
	640 x 480 @60p
	720 x 480 @60p
	800 x 600 @60p
	1280 x 720 @60p
	1920 x 1080 @60i
	1900 x 1080 @30p
	1920 x 1080 @60p
	1024 x 768 @60p
	1920 x 1080 @30p
Aerial input	: F-type (75 Ω)

1.1.2 Sound

Sound Mode	: Mono / Stereo / Virtual Surround
Maximun Powe r	: 2 X 10 W

1.1.3 Miscellaneous

Power Supply	
AC-input	: 90V ~ 264VAC, 50/60±3Hz
Normal Operation	
Power consumption:	< 185W (LC370WU1-SL02)
Standby power	: < 1W (110V/60Hz only)
Power cord length	: 1.8M
Power cord type	: 3 lead with earth plug , plugable (US type)
Power indicator	: LED (On: Green, Standby: Red, VGA mode Standby: Red)
Horizontal Scan	
Horizontal	:30 - 76 KHz
Vertical	: 56 – 62 Hz

Ambient Conditions

Temperature	: 0°C to 40°C
Humidity	: 10 to 90%(non -condensing)

1.2 Connector

1.2.1 Signal connector

FL3-DLH 37FHD /42FHD /47FHD I/O function is located on TV module, including
Tuner: NAFTA.

HDMI IN1: HDMI input (TV digital interface support HDCP) with digital
audio or with AV IN3 audio R/L.

HDMI IN2: HDMI input (TV digital interface support HDCP) with digital
audio or with AV IN3 audio R/L.

AV IN3 : Video3 (CVBS, RCA jack) and S-Video share with same
audio R/L (RCA jack).

AV IN1 : YPbPr component video1 (RCA jack) with audio R/L (RCA jack).

AV IN2 : YPbPr component video2 (RCA jack) with audio R/L (RCA jack).

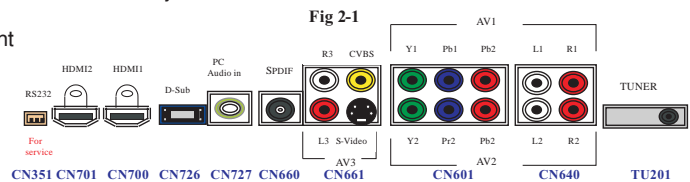
Side AV IN: Side Video (CVBS, RCA jack), Side S-Video and HDMI (DVI)
share with same audio R/L (RCA jack).

Headphone OUT : Audio R/L out (mini-jack)

SPDIF OUT : RCA jack

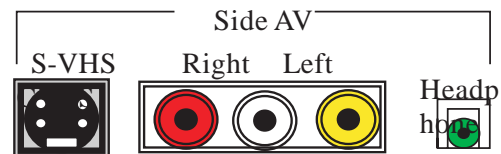
PC VGA: D-SUB 15 pins

PC Audio: Mini-jack



1.2.2 Side

CVBS In (Cinch)
SVHS In
Audio L/R In (Cinch)
Headphone



1.2.3 Input signal

TV Signal type:

RF Signal : Aerial input / 10mV(80dBuV)

Video signal : Video(RCA CVBS input) / 1Vpp (300mV-sync
, 700mV-video.)

S video input / 1VppY-signal, 300mVpp C-signal
COMP Video (YPbPr input)/ 1Vpp Y signal,
350mVpp Pb, Pr signal

HDMI : Digital interface with 4 channels TMDS signal

Audio signal : Audio (1) R/L for AV IN1 (Comp-video1).

Level: - Nominal : 0.5 V rms.
- Maximum : 1.5 V rms.
- Impedance > 10 k ohm.

Audio (2) R/L for AV IN2 (Comp-video2).

Level: - Nominal : 0.5 V rms.
- Maximum : 1.5 V rms.
- Impedance > 10 k ohm.

Audio (3) R/L for AV IN3 (share with CVBS
Video3 and S-video). (If the HDMI
signal comes from a DVD player
with a DVI connector and audio RCA
Jacks, then the RCA jacks should
be connected to AV IN3)

Level: - Nominal : 0.5 V rms.
- Maximum : 1.5 V rms.
- Impedance > 10 k ohm.

Side Audio R/L for Side AV IN (share with Side
CVBS Video and S-video).

Level: - Nominal : 0.5 V rms.
- Maximum : 1.5 V rms.
- Impedance > 10 k ohm.

PC Signal type:

Analog Video : 0.7 Vp-p linear, positive polarity
 Separate Sync. : TTL level, separate, positive or negative polarity
 Audio signal : Mini-jack audio input,
 Level: - Nominal : 0.5 V rms.
 - Maximum : 1.5 V rms.
 - Impedance > 10 k ohm.

Signal source : Pattern generator format as attachment. (table 1 to 11)

Reference generator: CHROMA 2200 or 2250

Headphone output :

Audio: R/L output -7.5mW(Typ.) at 32ohm.
 3.5mm stereo jack with switch
 Impedance is between 8 ohm and 600 ohm

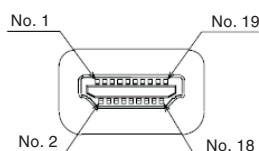
SPDIF output:

Level 0.5V ~ 1V Square Wave

HDMI Pin assignment (NAFTA only)

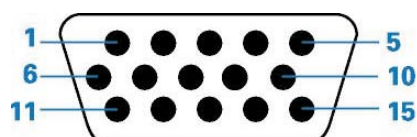
PIN No.	SIGNAL b(PC)
1	Red
2	Green
3	Blue
4	NC
5	GND
6	Red GND
7	Green GND
8	Blue GND
9	+5V (Supply from PC)
10	Sync GND
11	NC
12	SDA
13	H-sync
14	V-sync
15	SCL

Type A Connector

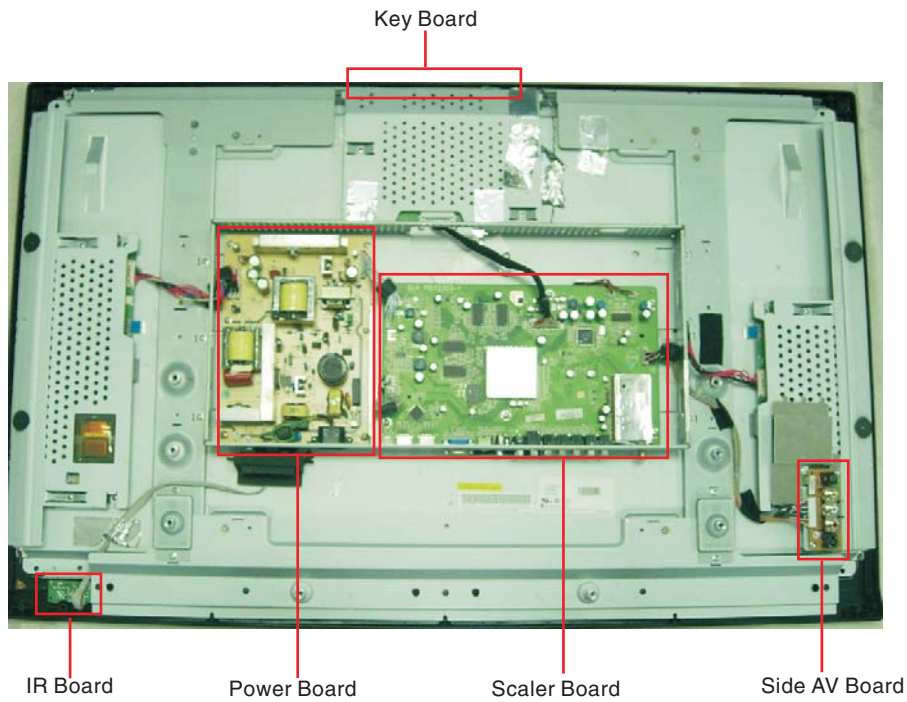


PIN No.	SIGNAL
1	TMDS Data2+
2	TMDS Data2 shield
3	TMDS Data2-
4	TMDS Data1+
5	TMDS Data1 shield
6	TMDS Data1-
7	TMDS Data0+
8	TMDS Data0 shield
9	TMDS Data0-
10	TMDS Clock+
11	TMDS Clock Shield
12	TMDS Clock-
13	CEC
14	Reserved (N.C. on device)
15	SCL
16	SDA
17	DDC/CEC Ground
18	+5V Power
19	Hot Plug Detect

D-sub Pin assignment



1.3 Chassis Overview




2. Safety Instructions, Warnings, and Notes

Index of this chapter:

- 2.1 Safety Instructions
- 2.2 Warnings
- 2.3 Notes

2.1 Safety Instructions


Safety regulations require the following **during** a repair:

- Connect the set to the Mains/AC Power via an isolation transformer (> 800 VA).
- Replace safety components, indicated by the symbol , only by components identical to the original ones. Any other component substitution (other than original type) may increase risk of fire or electrical shock hazard.

Safety regulations require that **after** a repair, the set must be returned in its original condition. Pay in particular attention to the following points:



- Route the wire trees correctly and fix them with the mounted cable clamps.
- Check the insulation of the Mains/AC Power lead for external damage.
- Check the strain relief of the Mains/AC Power cord for proper function.
- Check the electrical DC resistance between the Mains/AC Power plug and the secondary side (only for sets that have a Mains/AC Power isolated power supply):
 1. Unplug the Mains/AC Power cord and connect a wire between the two pins of the Mains/AC Power plug.
 2. Set the Mains/AC Power switch to the "ON" position (keep the Mains/AC Power cord unplugged!).
 3. Measure the resistance value between the pins of the Mains/AC Power plug and the metal shielding of the tuner or the aerial connection on the set. The reading should be between 4.5 Mohm and 12 Mohm.
 4. Switch "OFF" the set, and remove the wire between the two pins of the Mains/AC Power plug.
- Check the cabinet for defects, to prevent touching of any inner parts by the customer.

2.2 Warnings





- All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD ) . Careless handling during repair can reduce life drastically. Make sure that, during repair, you are connected with the same potential as the mass of the set by a wristband with resistance. Keep components and tools also at this same potential. Available ESD protection equipment:
 - Complete kit ESD3 (small tablemat, wristband, connection box, extension cable and earth cable) 4822 310 10671.
 - Wristband tester 4822 344 13999.
- Be careful during measurements in the high voltage section.
- Never replace modules or other components while the unit is switched "ON".
- When you align the set, use plastic rather than metal tools. This will prevent any short circuits and the danger of a circuit becoming unstable.

2.3 Notes

2.3.1 General

- Measure the voltages and waveforms with regard to the chassis (= tuner) ground () , or hot ground () , depending on the tested area of circuitry. The voltages and waveforms shown in the diagrams are indicative. Measure them in the

Service Default Mode (see chapter 5) with a colour bar signal and stereo sound (L: 3 kHz, R: 1 kHz unless stated otherwise) and picture carrier at 475.25 MHz for PAL, or 61.25 MHz for NTSC (channel 3).

- Where necessary, measure the waveforms and voltages with () and without () aerial signal. Measure the voltages in the power supply section both in normal operation () and in stand-by () . These values are indicated by means of the appropriate symbols.
- The semiconductors indicated in the circuit diagram and in the parts lists, are interchangeable per position with the semiconductors in the unit, irrespective of the type indication on these semiconductors.
- Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the "double-D symbol", are trademarks of Dolby Laboratories.

2.3.2 Schematic Notes

- All resistor values are in ohms, and the value multiplier is often used to indicate the decimal point location (e.g. 2K2 indicates 2.2 kohm).
- Resistor values with no multiplier may be indicated with either an "E" or an "R" (e.g. 220E or 220R indicates 220 ohm).
- All capacitor values are given in micro-farads ($\mu = \times 10^{-6}$), nano-farads ($n = \times 10^{-9}$), or pico-farads ($p = \times 10^{-12}$).
- Capacitor values may also use the value multiplier as the decimal point indication (e.g. 2p2 indicates 2.2 pF).
- An "asterisk" (*) indicates component usage varies. Refer to the diversity tables for the correct values.
- The correct component values are listed in the Spare Parts List. Therefore, always check this list when there is any doubt.

2.3.3 Lead-free Solder

Philips CE is producing lead-free sets (PBF) from 1.1.2005 onwards.

Identification: The bottom line of a type plate gives a 14-digit serial number. Digits 5 and 6 refer to the production year, digits 7 and 8 refer to production week (in example below it is 2006 week 17).



E_06532_024.eps
130606

Figure 2-1 Serial number example

Regardless of the special lead-free logo (which is not always indicated), one must treat all sets from this date onwards according to the rules as described below.



Figure 2-2 Lead-free logo

Due to lead-free technology some rules have to be respected by the workshop during a repair:

- Use only lead-free soldering tin Philips SAC305 with order code 0622 149 00106. If lead-free solder paste is required, please contact the manufacturer of your soldering equipment. In general, use of solder paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free soldering tin. The solder tool must be able:
 - To reach a solder-tip temperature of at least 400°C.
 - To stabilise the adjusted temperature at the solder-tip.
 - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature of around 360°C - 380°C is reached and stabilised at the solder joint. Heating time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400°C, otherwise wear-out of tips will increase drastically and flux-fluid will be destroyed. To avoid wear-out of tips, switch "off" unused equipment or reduce heat.
- Mix of lead-free soldering tin/parts with leaded soldering tin/parts is possible but PHILIPS recommends strongly **to avoid** mixed regimes. If this cannot be avoided, carefully clear the solder-joint from old tin and re-solder with new tin.
- Use only original spare-parts listed in the Service-Manuals. Not listed standard material (commodities) has to be purchased at external companies.
- For sets produced before 1.1.2005, containing leaded soldering tin and components, all needed spare parts will be available till the end of the service period. For the repair of such sets nothing changes.

In case of doubt whether the board is lead-free or not (or with mixed technologies), you can use the following method:

- Always use the highest temperature to solder, when using SAC305 (see also instructions below).
- De-solder thoroughly (clean solder joints to avoid mix of two alloys).

2.3.4 Alternative BOM identification

In September 2003, Philips CE introduced a change in the way the serial number (or production number, see Figure 2-1) is composed. From this date on, the **third digit** in the serial number (example: AG2B0335000001) indicates the number of

the alternative BOM (Bill of Materials used for producing the specific model of TV set). It is possible that the same TV model on the market is produced with e.g. two different types of displays, coming from two different O.E.M.s.

By looking at the third digit of the serial number, the service technician can see if there is more than one type of B.O.M. used in the production of the TV set he is working with. He can then consult the At Your Service Web site, where he can type in the Commercial Type Version Number of the TV set (e.g. 28PW9515/12), after which a screen will appear that gives information about the number of alternative B.O.M.s used. If the third digit of the serial number contains the number 1 (example: AG1B0335000001), then there is only one B.O.M. version of the TV set on the market. If the third digit is a 2 (example: AG2B0335000001), then there are two different B.O.M.s. Information about this is important for ordering the correct spare parts!

For the third digit, the numbers 1...9 and the characters A...Z can be used, so in total: 9 plus 26 = 35 different B.O.M.s can be indicated by the third digit of the serial number.

2.3.5 Board Level Repair (BLR) or Component Level Repair (CLR)

If a board is defective, consult your repair procedure to decide if the board has to be exchanged or if it should be repaired on component level.

If your repair procedure says the board should be exchanged completely, do not solder on the defective board. Otherwise, it cannot be returned to the O.E.M. supplier for back charging!

2.3.6 Practical Service Precautions

- **It makes sense to avoid exposure to electrical shock.** While some sources are expected to have a possible dangerous impact, others of quite high potential are of limited current and are sometimes held in less regard.
- **Always respect voltages.** While some may not be dangerous in themselves, they can cause unexpected reactions that are best avoided. Before reaching into a powered TV set, it is best to test the high voltage insulation. It is easy to do, and is a good service precaution.

3. Directions for Use

You can download this information from the following websites:

<http://www.philips.com/support>

<http://www.p4c.philips.com>

OSD Menu

TV

Magnavox/Philips Digital UI-TV/AV1/AV2/AV3/Side/HDMI				
OSD Layer 1	2	3	4	5
Picture	Smart Picture	Personal Rich Natural Soft Power Saver		
	Contrast	slider		
	Brightness	slider		
	Color	slider		
	Sharpness	slider		
	Color temperature	Normal Warm Cool		
	Tint	slider		
	Noise Reduction	slider		
	Dynamic Contrast	OFF Medium Maximum		
	Picture format	Automatic Super zoom 4:3 Movie expand 14:9 Movie expand 16:9 16:9 subtitle Wide screen		
Sound	Smart sound	Personal Speech Movies	EQUALIZER EQUALIZER EQUALIZER	
	Sound mode	Mono Stereo Virtual Surround		
	Alternate audio	Main SAP		
	AVL	Off On		
Features	Closed captions	Off On On during mute		
	Caption service	CC-1 CC-2 CC-3 CC-4 T-1 T-2 T-3 T-4		

3. Directions for Use

	Digital caption service	CS-1 CS-2 CS-3 CS-4 CS-5 CS-6		
	Digital caption options	Reset to default	Reset to default	
		Size	Default Small Standard Large	
		Style	Default Monospaced serif Serif Monospaced sans serif Sans serif Casual Cursive Small caps	
		Text	Color	Default Black White Red Green Blue Yellow Magenta Cyan
			Opacity	Default Solid Transparent Translucent Flashing
		Background	Color	Default Black White Red Green Blue Yellow Magenta Cyan
			Opacity	Default Solid Transparent Translucent Flashing
	Preferred channels			
	Sleeptimer	slider		
Installation	Language	English Francais Espanol		
	Autoprogram	Antenna Cable	(Analog first then Digital)	

	Source	TV AV1 AV2 AV3 HDMI 1 HDMI 2 Side PC		
	Clock	Enter Time(Hrs,Mins) AM/PM		
	Weak channel Installation			
	Current Software Info	(Current software Version)		
	Reset AV settings	Start now		
EXIT	EXIT			

PC

Magnavox/Philips Digital UI-PC				
1	2	3	4	5
Picture	Contrast	slider		
	Brightness	slider		
	Color temp	Normal Warm Cool		
	Picture format	Full screen 4:3		
Sound	Smart sound	Personal Speech Movie	Equalizer Equalizer Equalizer	
	Virtual surround	On Off		
Installation	Language	English Francais Espanol		
	Source	TV AV1 AV2 AV3 HDMI 1 HDMI 2 Side PC		
	Picture Adjustment	Auto adjust	Yes	
			Store ?	Yes No
	Factory reset	Manual adjust	Phase Clock Horizontal Vertical	
EXIT	Exit			

4. Mechanical Instructions

Index of this chapter:
4.1 Assy/Panel Removal
4.2 Set Re-assembly

4.1 Assy/Panel Removal

Notes: Please put your machine on soft material to avoid to scrape panel when you disassemble it.

Front View



Fig 1

Back View

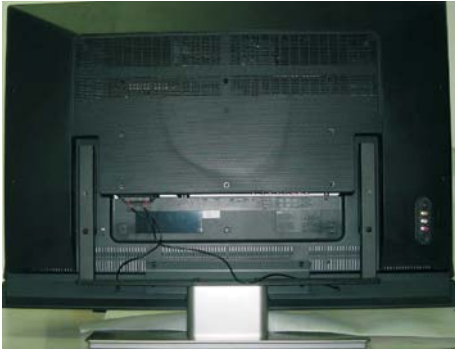


Fig 2

Step 1: Remove the Base.
Unscrew two screws as Fig 3

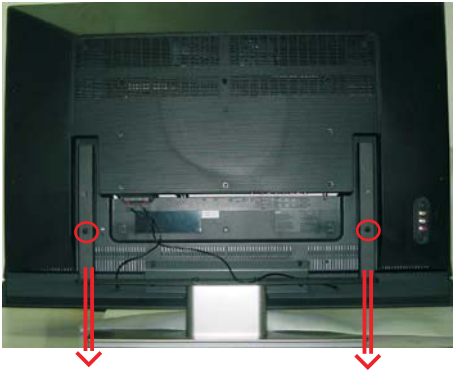
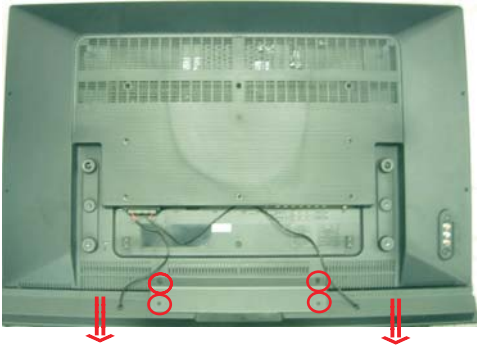


Fig 3

Step2: Remove the speaker
Unscrew four screws as Fig 4



Step 3: Remove Back cover
Unscrew twenty two screws as Fig 5



Fig 5

Step4:Remove Main Shielding
Unscrew twenty one screws as Fig 6 and Fig 7

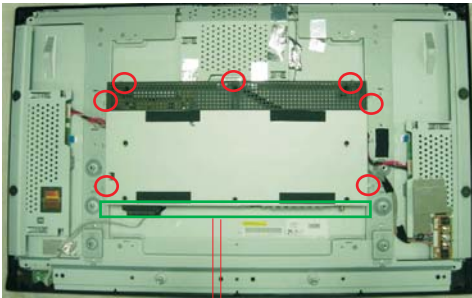


Fig 6

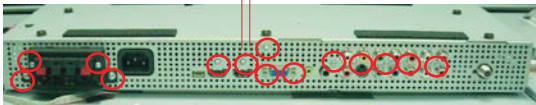


Fig 7

Step 5: Remove Power Board,Scaler Baord,IR Baord,
Side AV Board.Key Board.
Unscrew Sixteen screws and disconnection
nine cables as Fig 8

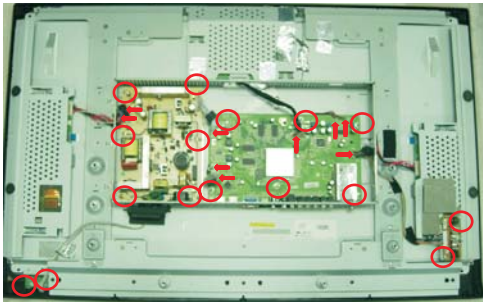


Fig 8

Step 6: Remove Main Frame+ Wire Assy
Unscrew six screws as Fig 9

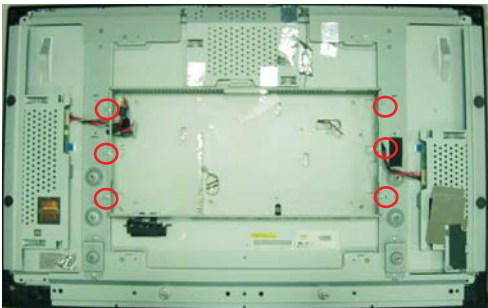


Fig 9

Step 7: Remove BKT-LB, BKT-TOP, BKT-RB, BKT-Bottom.
Unscrew Twenty five screws as Fig.10

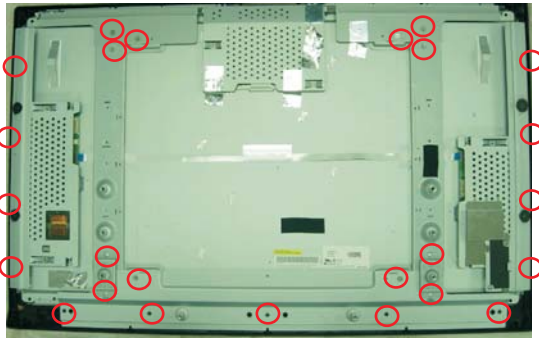
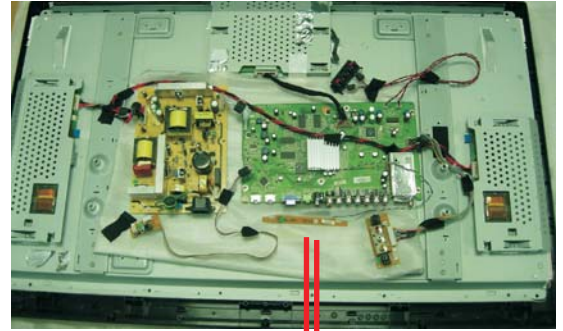


Fig 10



Service position

Step 8: Remove BKT-RA and BKT-LA
Unscrew four screws as Fig.11

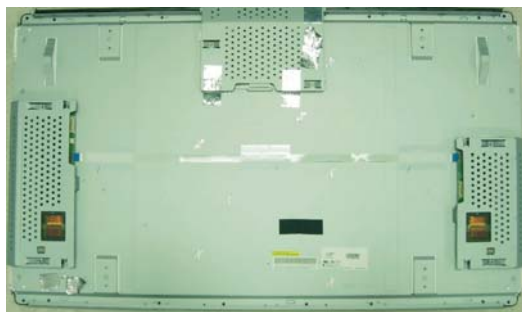


Fig 11

Step 9: Pick up Front bezel assy as Fig 12



Fig 12



4.2 Set Re-assembly

To re-assemble the whole set, execute all processes in reverse order.

Notes:

- While re-assembling, make sure that all cables are placed and connected in their original position.
- Pay special attention not to damage the EMC foams at the SSB shielding. Check that EMC foams are put correctly on their places.

In warranty, it is not allowed to disassembly the LCD panel, even the backlight unit defect.

Out of warranty, the replacment of backlight unit is a correct way when the defect is cused by backlight (CCFL,Lamp).

5. Service Modes, Error Codes and Fault Finding

index of this chapter:

5.1 CSM

5.2 Factory Mode

5.3 Repair Flow Chart

5.1 CSM

It can display CSM windows message when press 1-2 3-6 5-4 on the button (RC) remote control in normal operation mode.

The following information is displayed on screen:

CSM Item	Contents	Remark
1: Set Type	37MF437B/37	Model Name
2: Production code	BZ000651123456	14 digit production-code(serial number)
3: SW-naming main-processor	FL3 37MF437BU_V2.00	SW version(FL3=family,37MF437B=model,U=Nafta region, V=version,2=SW main version,00=SW sub version)
4: Code 1	FF FF FF FF FF	Error codes in NVM/EEPROM (5 last logged errors)
5: Code 2	FF FF FF FF FF	Error codes in NVM/EEPROM (5 first logged errors)
6: Key (HDCP)	Invalid	HDMI information whether HDCP-key is valid
7: Digital signal quality ATSC		Digital signal level
8: NVM-naming	PANEL_CLAA_37_XP3	Contents per Panel-type

About error code,Please refer to the table below.

Error code	Event
0x01	DDR error
0x02	IIC bus error
0x03	Tuner error
0x04	Demod error

5.2 Factory Mode

It can enter Factory Mode

1. Press "Menu" in normal operation mode to enter OSD.
2. Press "062596+Menu" on the button (RC) remote control in OSD.
3. Press "Menu" again. The screen will appear "FAC" in top right corner.

OSD behavior:

Before press number key change OSD item

Now remove previous function, press number key then press OK will change value

Item	Description	Range	method of operation
//Action Items			
0 Exit Factory			press OK.
1 RESET_SPC	reset item SP_GAIN_BRI_XXX to SP_GAIN_CLR_XXX to default value		press OK.
2 RESET_CSM_CODE	Reset CSM ERROR Code to 0		press OK.
3 AUTO_COLOR	PC: any pattern has black and white YPbPr:SMPTEbar(color bar), any timing.		press OK. when autocolour, the OSD disappear, when finished. OSD appear.
//Switch Items			
4 VIRGIN Mode			On/Off
5 AGING MODE	turn<On> and no signal input		On/Off
6 GAMMA_TABLE	use gamma table or not		On/Off
7 COLOR_ENHANCE			On/Off
8 SET_PIN			When SET_PIN is [ON], shows Parental control->Set pin, else shows Parental control->Change pin. When SET_PIN is on, can not enter any locked sub-tree until set new pin.
9 FINETUNE_EQ	if on, set DL 26" 32" eq 120Hz to 200Hz, 10KHz to 8KHz (no change OSD)		On/Off
10 ORT_MODE	if On, AC switch on/off turn on the TV		On/Off
//ADC Gain & Offset (values different by VGA and YPbPr) AutoColor changes those items			
11 ADC_GAIN_R		0~255	Press Left and Right to change value
12 ADC_GAIN_G		0~255	
13 ADC_GAIN_B		0~255	
14 ADC_OFFSET_R		0~127	
15 ADC_OFFSET_G		0~127	
16 ADC_OFFSET_B		0~127	
//Color Temperature (values different by AV,VGA,DTV,HDMI,YPbPr)			
17 CLR_TEMP_R	Back-End Scaler R G B Gain	0~255	Press Left and Right to change value
18 CLR_TEMP_G		0~255	
19 CLR_TEMP_B		0~255	
//Smart Picture (values different by smart picture)			
20 SP_MODE_3DNR	Except YPbPr 720P above timing	0~5	Press Left and Right to change value
21 SP_MODE_PWM	(when Dynamic contrast Off)	0~255	
//Smart Picture Default (values different by AV,DTV,HDMI,YPbPr) Front-End, because each source has the same smart picture setting, for different between each source			
22 SP_GAIN_BRI_DTV	Brightness	0~255	Press Left and Right to change value
23 SP_GAIN_BRI_AV		0~255	
24 SP_GAIN_BRI_YPBPR		0~255	
25 SP_GAIN_BRI_HDMI		0~255	
26 SP_GAIN_BRI_VGA		0~255	
27 SP_GAIN_CNT_DTV	Contrast	0~255	
28 SP_GAIN_CNT_AV		0~255	
29 SP_GAIN_CNT_YPBPR		0~255	
30 SP_GAIN_CNT_HDMI		0~255	
31 SP_GAIN_CNT_VGA		0~255	
32 SP_GAIN_TINT_DTV	Color	0~255	
33 SP_GAIN_TINT_AV		0~255	
34 SP_GAIN_TINT_YPBPR		0~255	
35 SP_GAIN_TINT_HDMI		0~255	

36	SP_GAIN_TINT_ATV	only for analog TV for PQ setting	0~255	
37	SP_GAIN_CLR_DTV	Color	0~255	
38	SP_GAIN_CLR_AV		0~255	
39	SP_GAIN_CLR_YBPPr		0~255	
40	SP_GAIN_CLR_HDMI		0~255	
	//PWM	(when Dynamic contrast On, avoid too dark, Dynamic contrast Controls contrast and PWM Ex: if the picture dark place is more, the PWM and contrast should be small, on the contrary should be large)		when Dynamic contrast turn Medium , it reference range PWM_NORMAL and PWM_MEDIUM when Dynamic contrast turn Maximun , it reference range PWM_NORMAL and
41	VIDEO_PWM_NORMAL		0~255	
42	VIDEO_PWM_MEDIUM		0~255	
43	VIDEO_PWM_MAXIMUN		0~255	
44	VGA_PWM_MIN	to limit PC brightness range	0~255	Dark
45	VGA_PWM_MAX		0~255	Bright
	//YPbPr H/V Position	(value different by each timing)		480i/p,576i/p,720p 50/60,1080i 24/25/30, 1080p 24/25/30/50/60 640x480@60[VGA]
46	YPBPR_POS_H			
47	YPBPR_POS_V			
48	YPBPR_PHASE	Manual adjust HDMI phase		
	//Audio			
49	AUD_GAIN_TV	volume different between audio source , for each source volume to be the same	64~-64	
50	AUD_GAIN_DTV		64~-64	
51	AUD_GAIN_HDMI		64~-64	
52	AUD_GAIN_SCART		64~-64	
53	AUD_GAIN_DVD			
54	AUD_HEADPHONE_VOL		12~-64	
55	AUD_BALANCE	amplifier left and right volume	-50~50	Press Left and Right to change value
	//Tuner & Panel Id			
56	TUNER_ID	4 is PHILIPS_FQA1236, 5 is Forward, 6 is PHILIPS_FQA1236_E, 7 is ALPS_TDQU4	4,5,6,7	
57	PANEL_ID	value the same to CLI command		

Select Smart picture to display a list of predefined picture settings, each corresponding with specific factory settings.

Personal refers to the personal preference settings of picture in the picture menu.

Note: This Magnavox TV has been set at the factory to look best in bright store environments, which typically use fluorescent lighting. As your home will likely not be as well lit as a store, we recommend that you cycle through the various smart picture modes to find the one that best suits your own viewing conditions. Most consumers will find that Natural is the correct choice.

You can press the Smart picture button on the remote control repeatedly to select either Personal, Rich, Natural, Soft, or Powersaver picture settings.

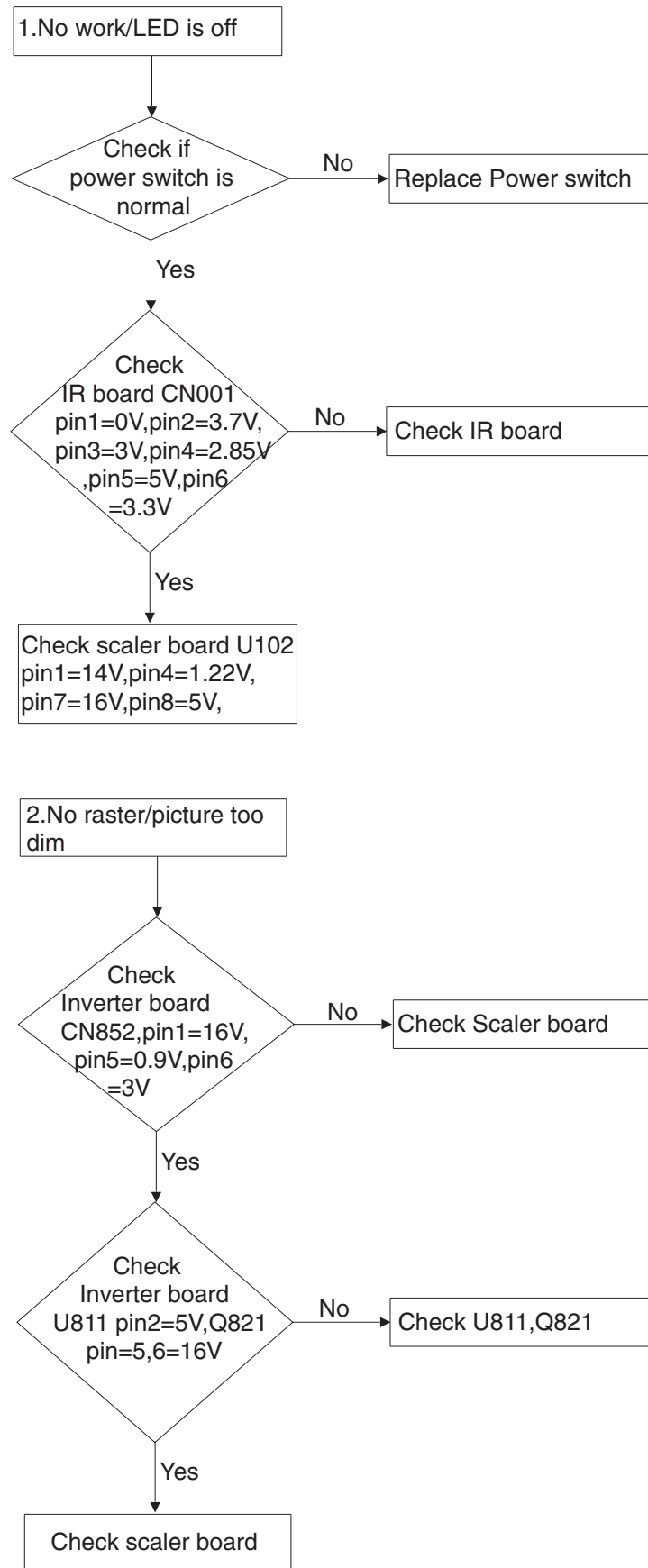
Note:

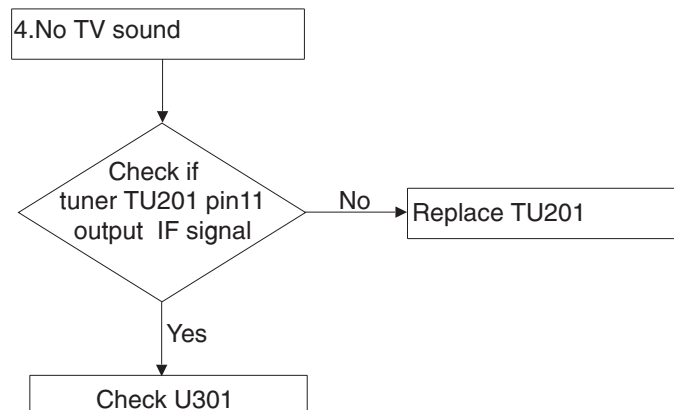
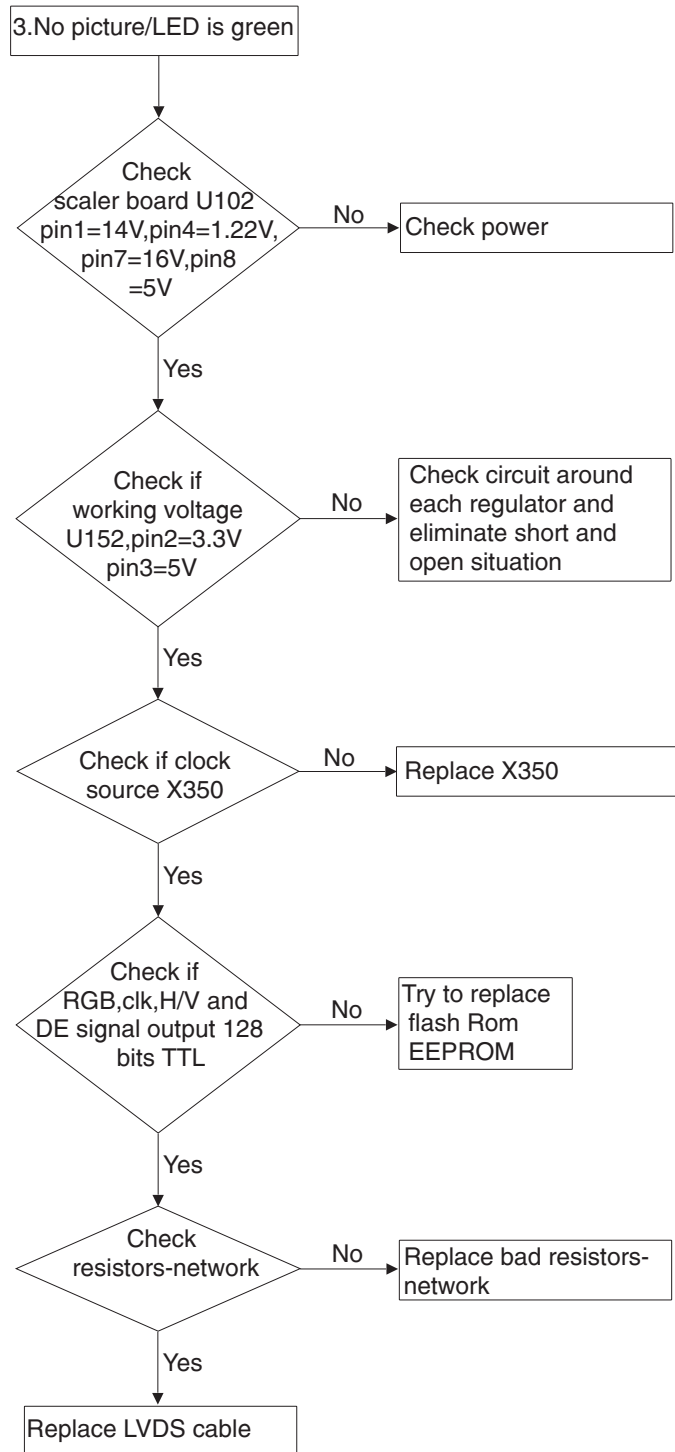
- When you watch programs by Composite Video signal, it's recommended to select Soft or Power saving Mode via Smart picture.

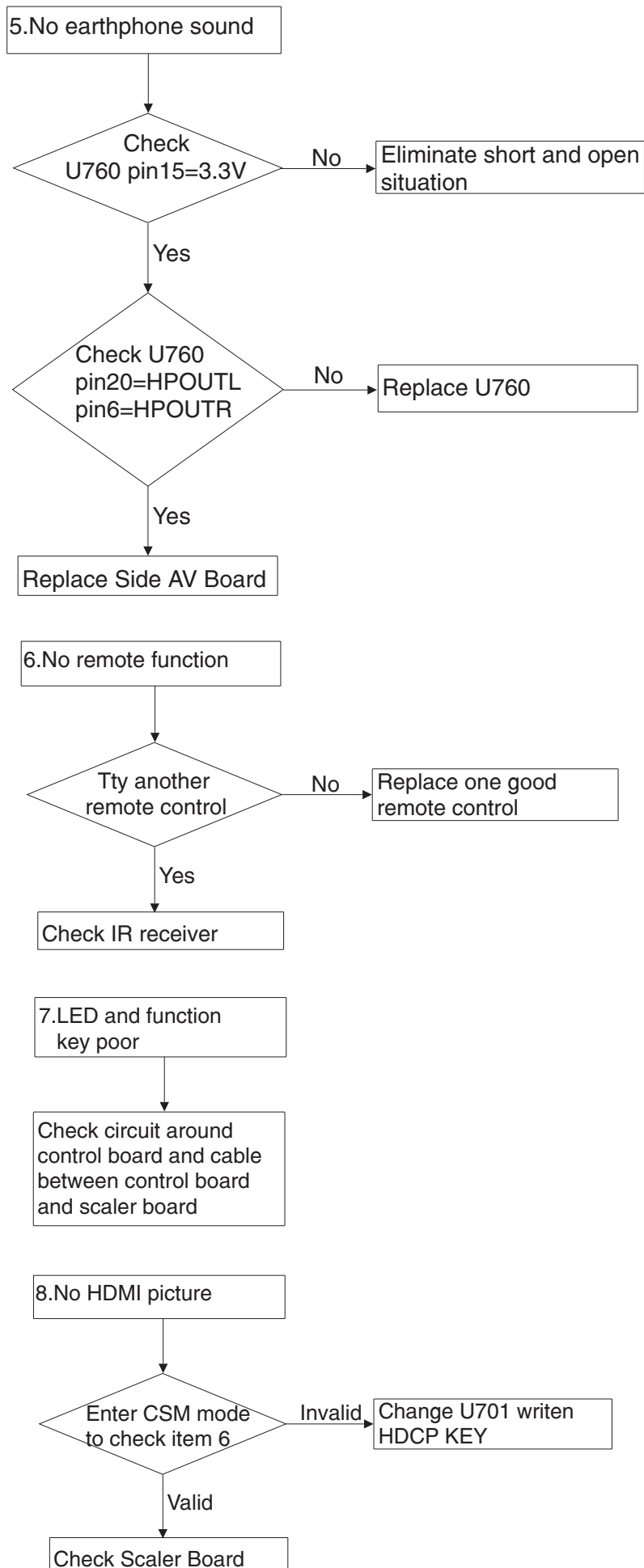
- The moment you are in a predefined Smart picture setting and you modify the Picture menu, all values of the menu will overwrite those previously made in personal setting.

Smart picture control items: (values different by smart picture)		
	User Menu OSD:(Back-End)	can be changed when factory mode
	Contrast	
	Brightness	
	Color	
	Sharpness	
	color temperature	
	Tint	
	Noise Reduction	
	Factory menu OSD	can be changed when factory mode
	SP_MODE_PWM (when Dynamic contrast Off)	
	SP_MODE_3DNR (range 0 to 5)	

5.3 Repair Flow Chart





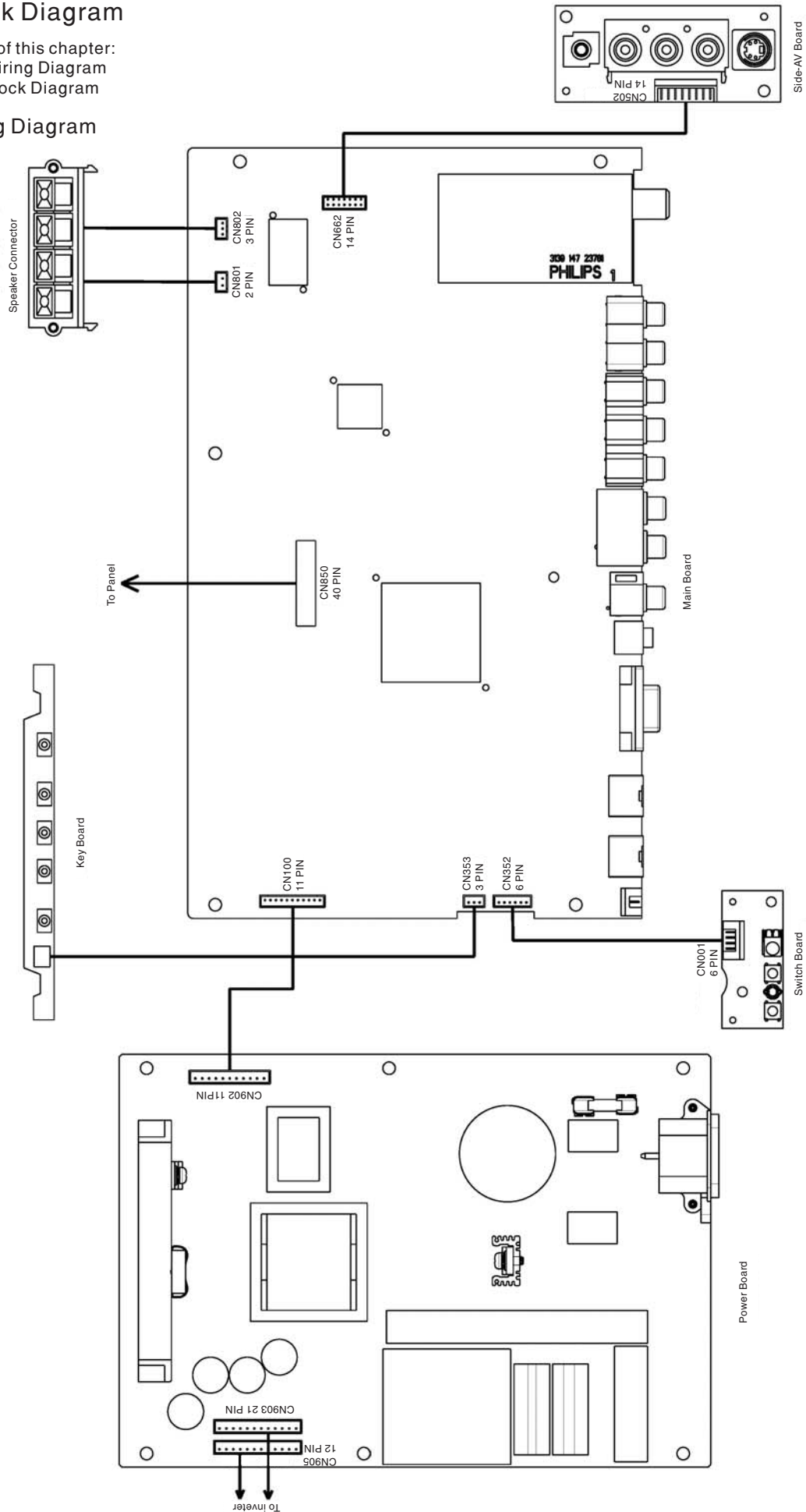


6. Block Diagram

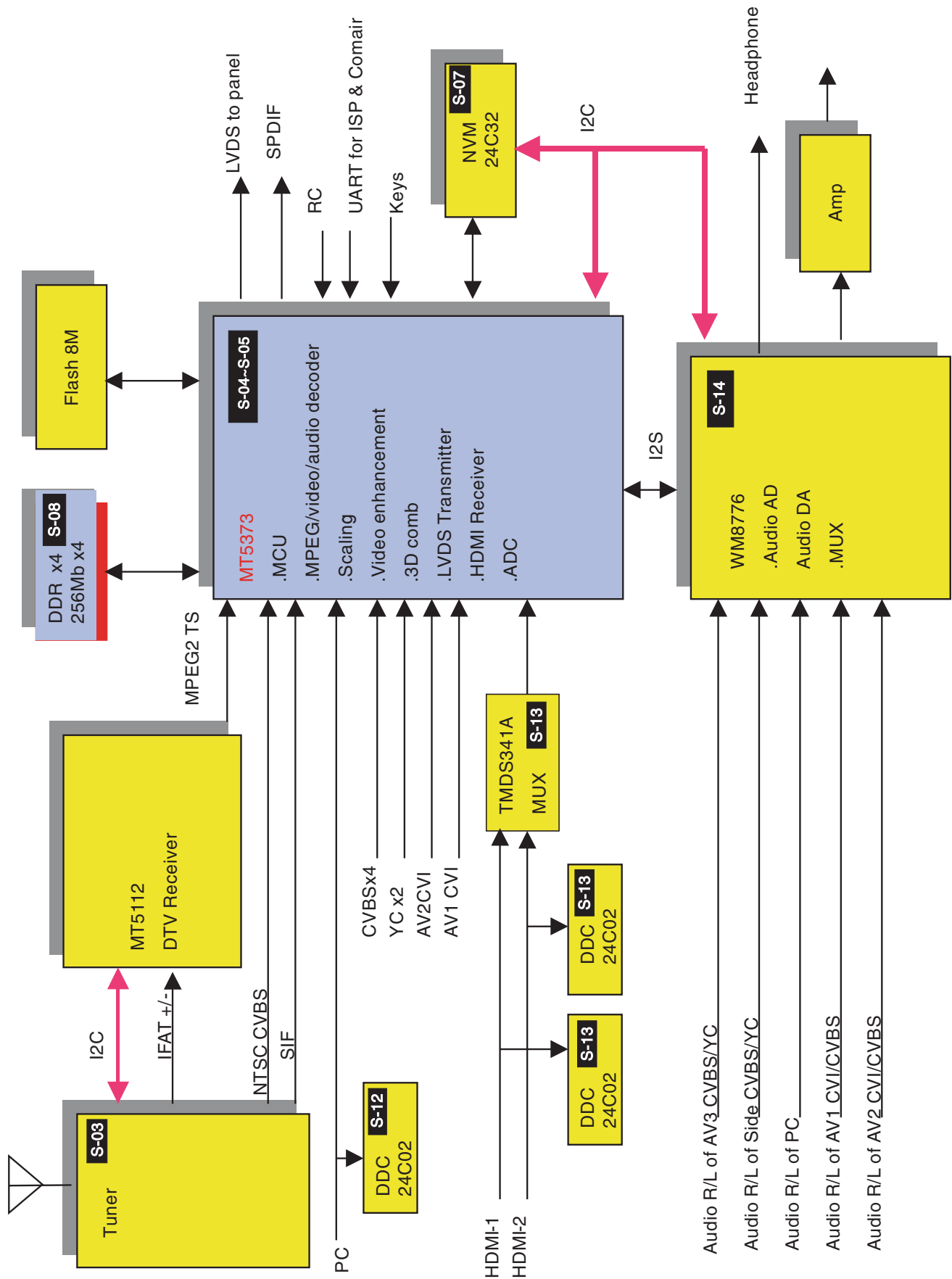
Index of this chapter:

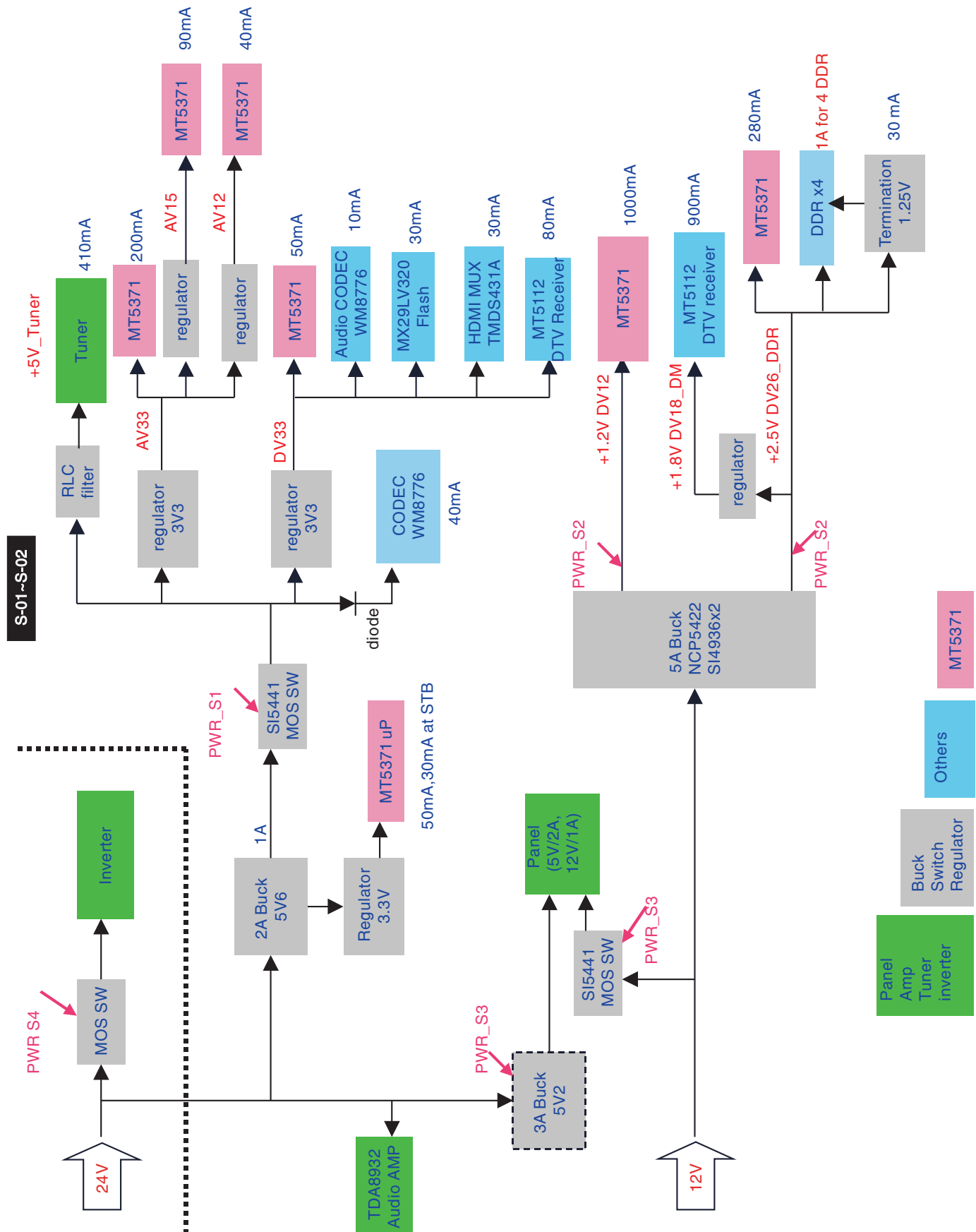
- 6.1 Wiring Diagram
- 6.2 Block Diagram

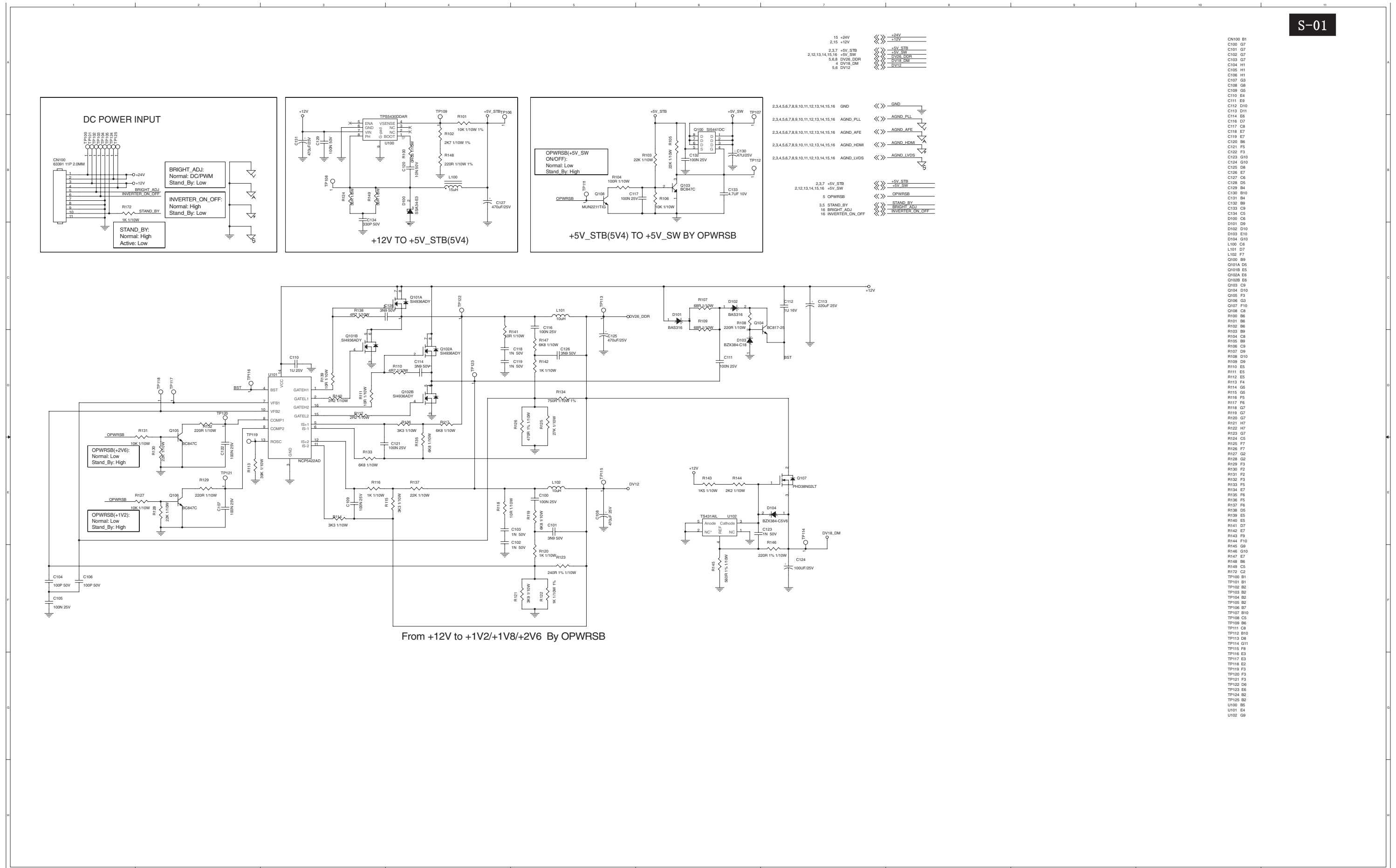
6.1 Wiring Diagram



Function Block of Main Board



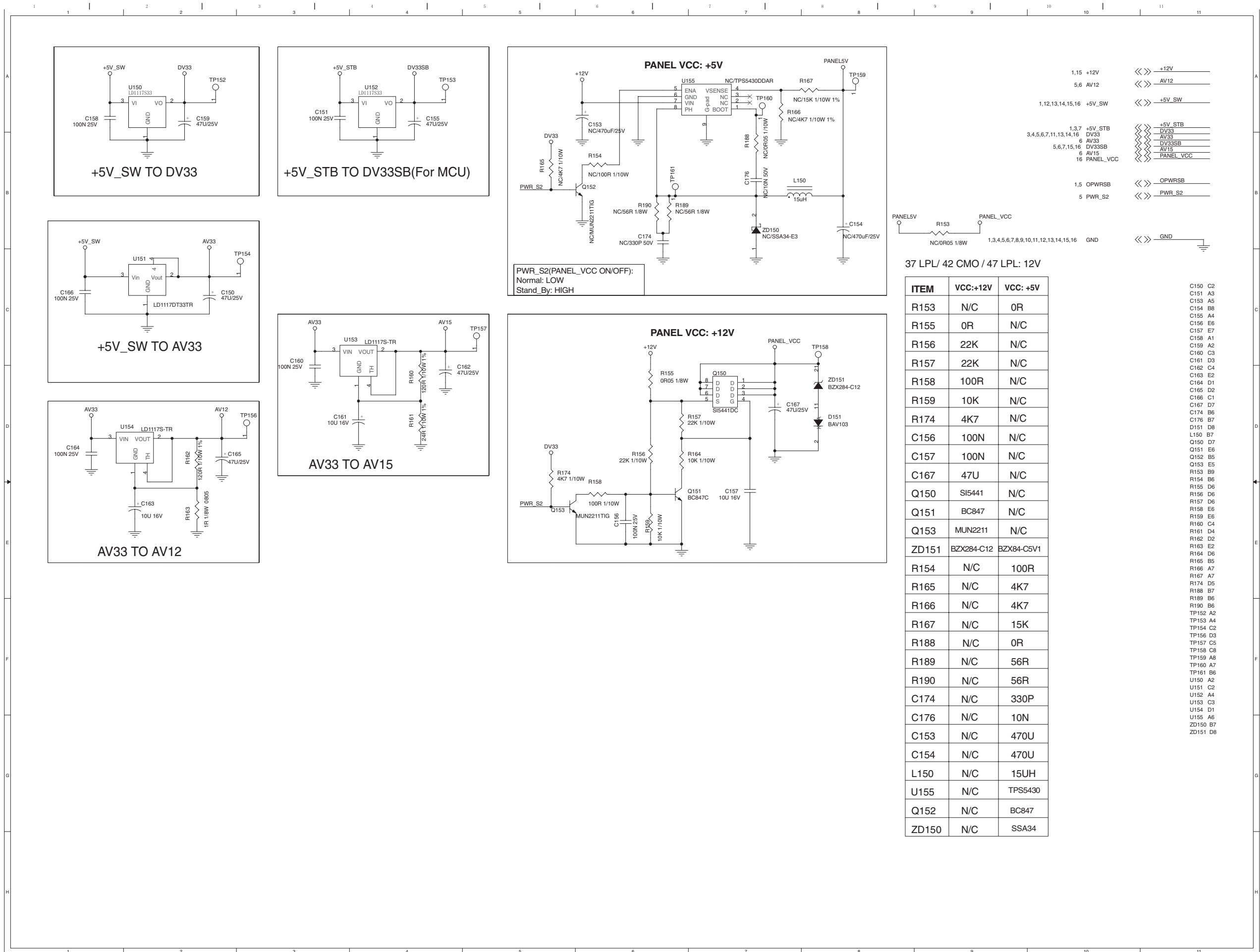




7. Circuit Diagrams and PWB Layouts

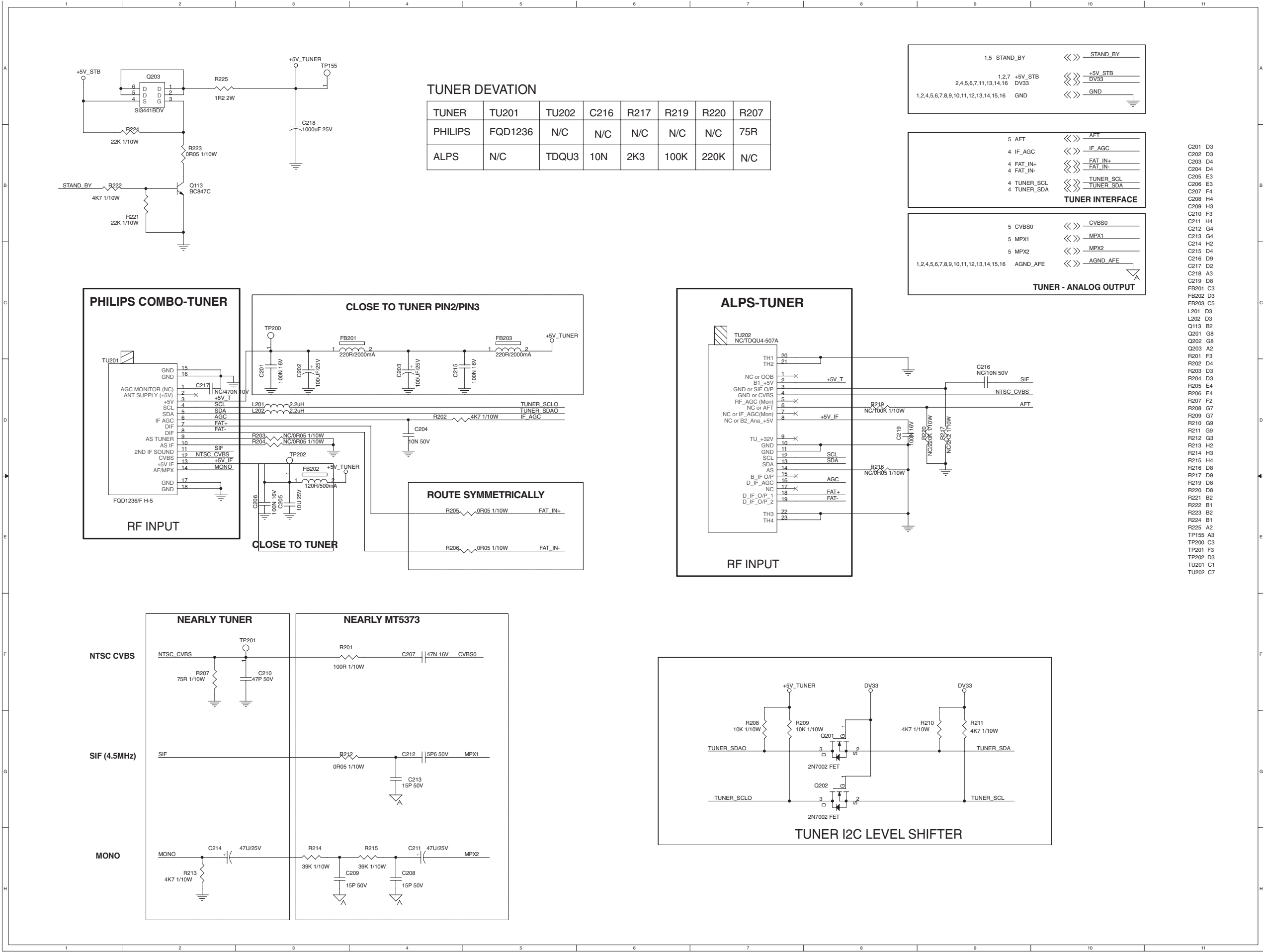
Scaler Board Schematic Diagram-Power

S-02



Scaler Board Schematic Diagram-TUNER

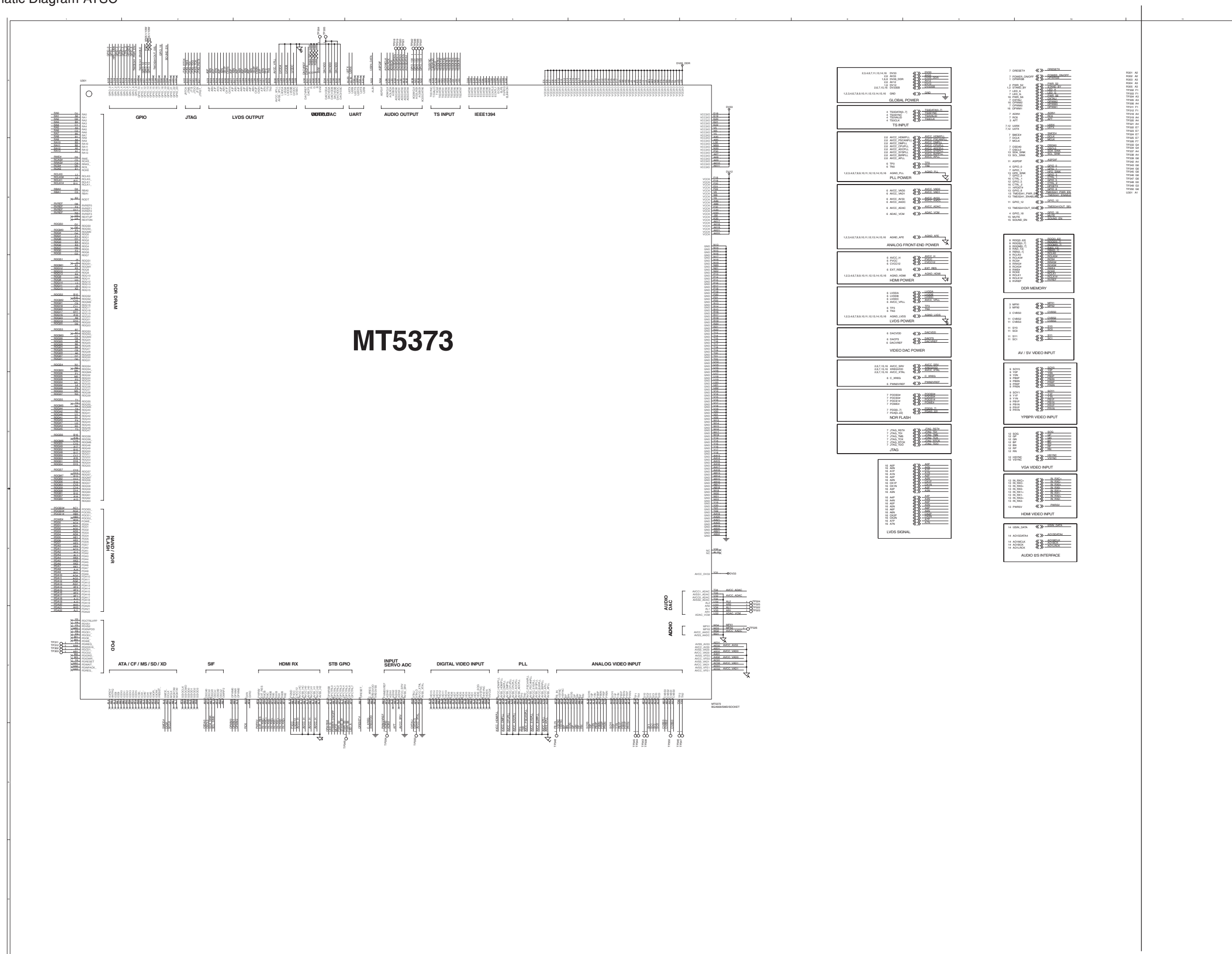
S-03



7. Circuit Diagrams and PWB Layouts

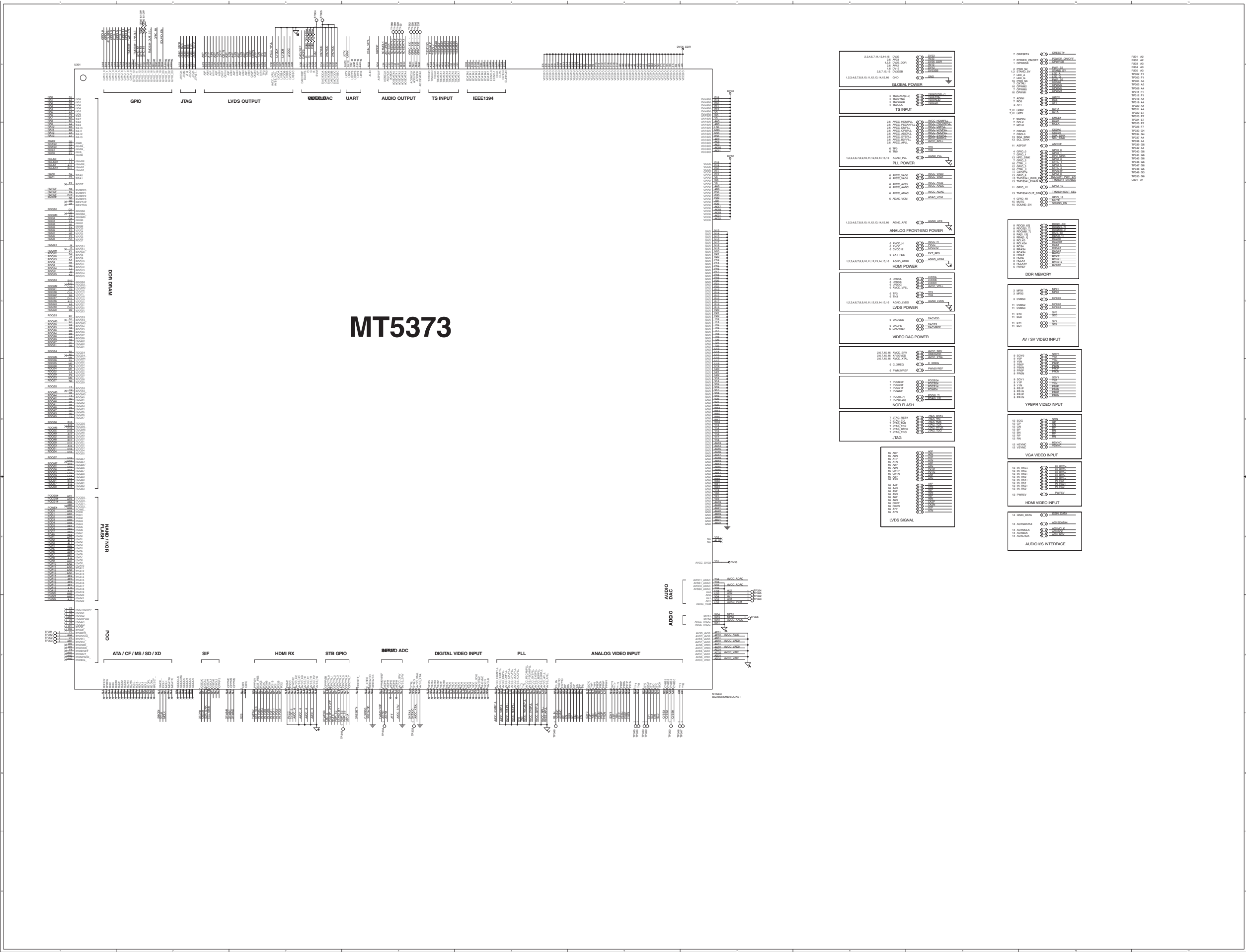
Scaler Board Schematic Diagram-ATSC

S-04



Scaler Board Schematic Diagram-ATSC

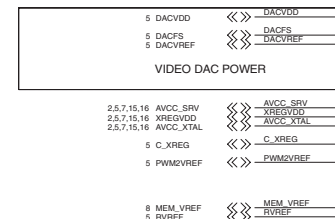
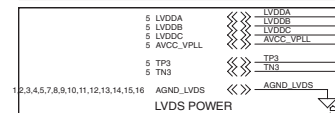
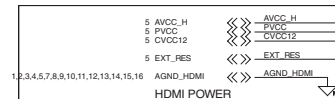
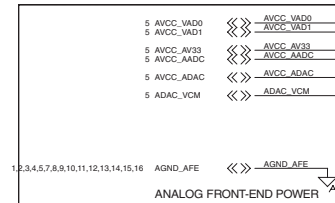
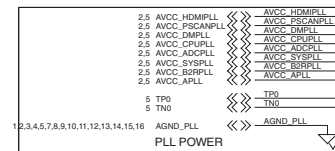
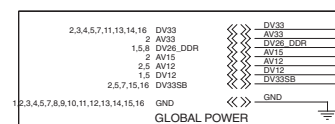
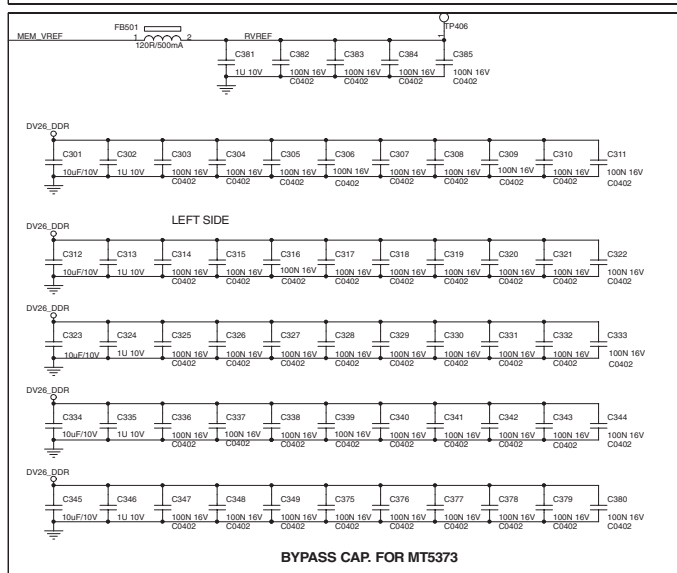
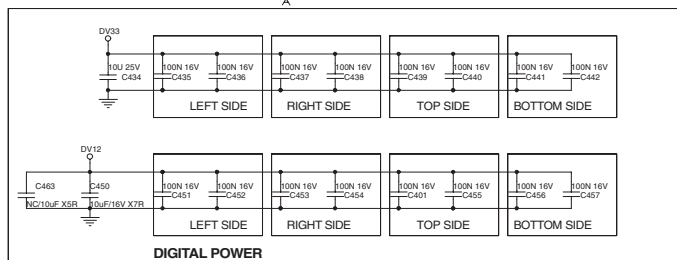
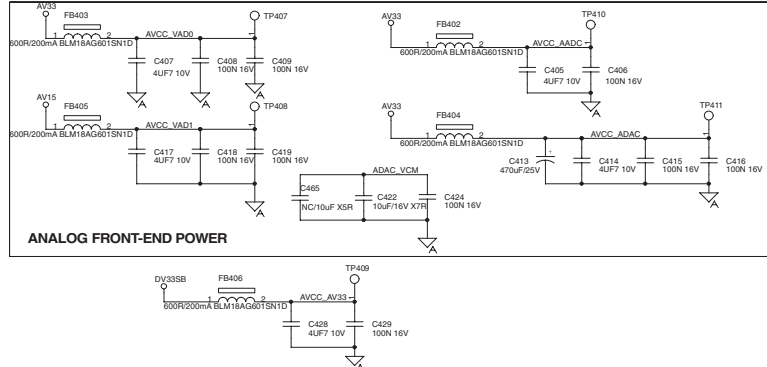
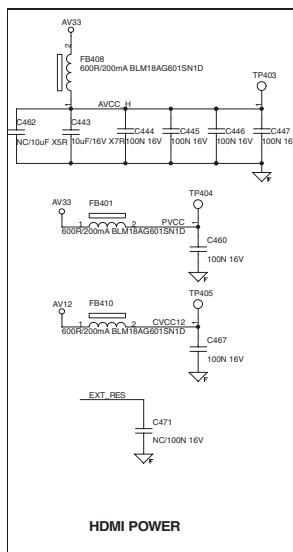
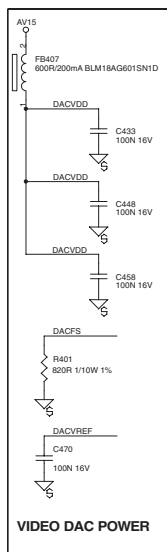
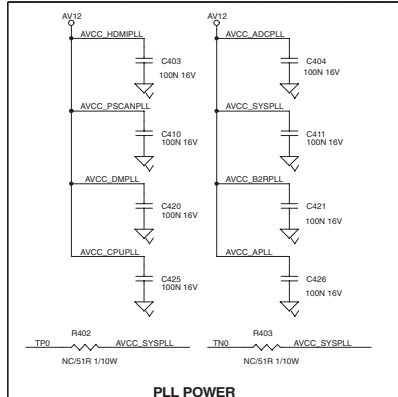
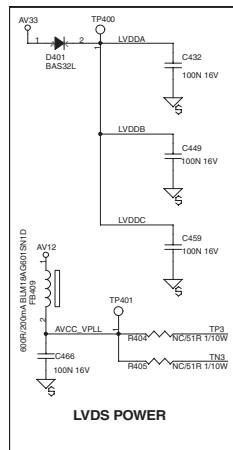
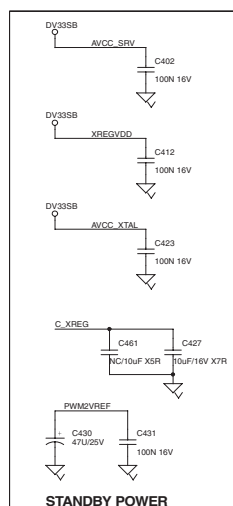
S-05



7. Circuit Diagrams and PWB Layouts

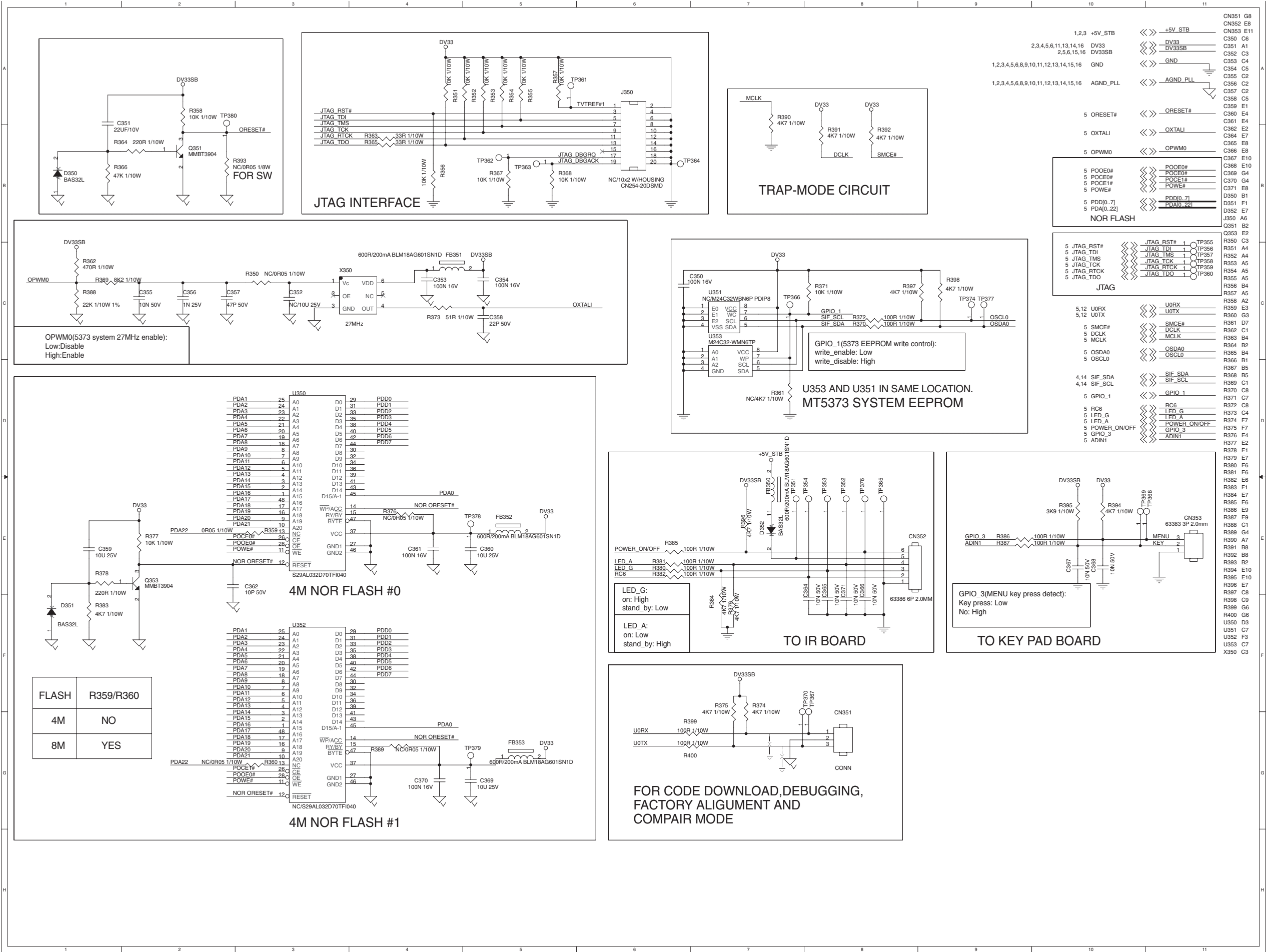
Scaler Board Schematic Diagram-BYPASS CAP

S-06

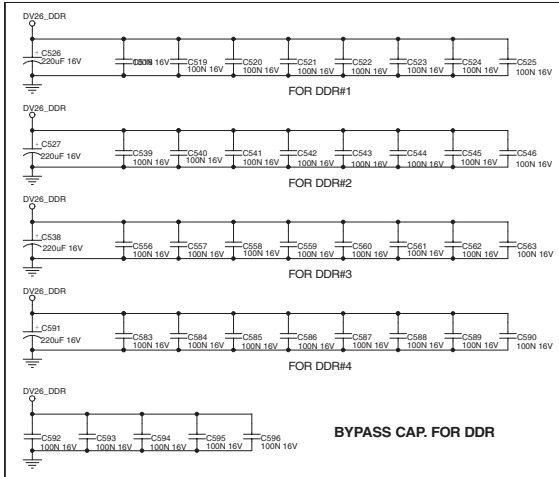


C301 E4
C302 E4
C303 E5
C304 E5
C305 E5
C306 E5
C307 E5
C308 E6
C309 E6
C310 E6
C311 E6
C312 E4
C313 E4
C314 E5
C315 E5
C316 E5
C317 E5
C318 E5
C319 E6
C320 E6
C321 E6
C322 E6
C323 E4
C324 E4
C325 E5
C326 E5
C327 E5
C328 E5
C329 E5
C330 E6
C331 E5
C332 E6
C333 E6
C334 F4
C335 F4
C336 F5
C337 F5
C338 F5
C339 F5
C340 F5
C341 F6
C342 F6
C343 F6
C344 F6
C345 F4
C346 F5
C347 F5
C348 F5
C349 F5
C375 F5
C376 F5
C377 F6
C378 F6
C379 F6
C380 F6
C381 D5
C382 D5
C383 D5
C384 D5
C385 D6
C401 D6
C402 A2
C403 A3
C404 A3
C405 A6
C406 A6
C407 A4
C408 A4
C409 A5
C410 B3
C411 B3
C412 B2
C413 B6
C414 B6
C415 B6
C416 B6
C417 B4
C418 B4
C419 B5
C420 B3
C421 B3
C422 B5
C423 B2
C424 B5
C425 B3
C426 B3
C427 C2
C428 B5
C429 B5
C430 C1
C431 C2
C432 D2
C433 C3
C434 C4
C435 C5
C436 C5
C437 C5
C438 C5
C439 C6
C440 C6
C441 C6
C442 C6
C443 C3
C444 C3
C445 C4
C446 C4
C447 C4
C448 D3
C449 D2
C450 D4
C451 D5
C452 D5
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C455 D6
C456 D6
C457 D6
C458 D3
C459 D2
C460 D4
C461 C2
C462 C3
C463 D4
C464 B5
C465 E1
C466 E1
C467 D4
C470 E2
C471 E3
D401 C1
R401 D2
R402 C2
R403 C3
R404 E2
R405 E2

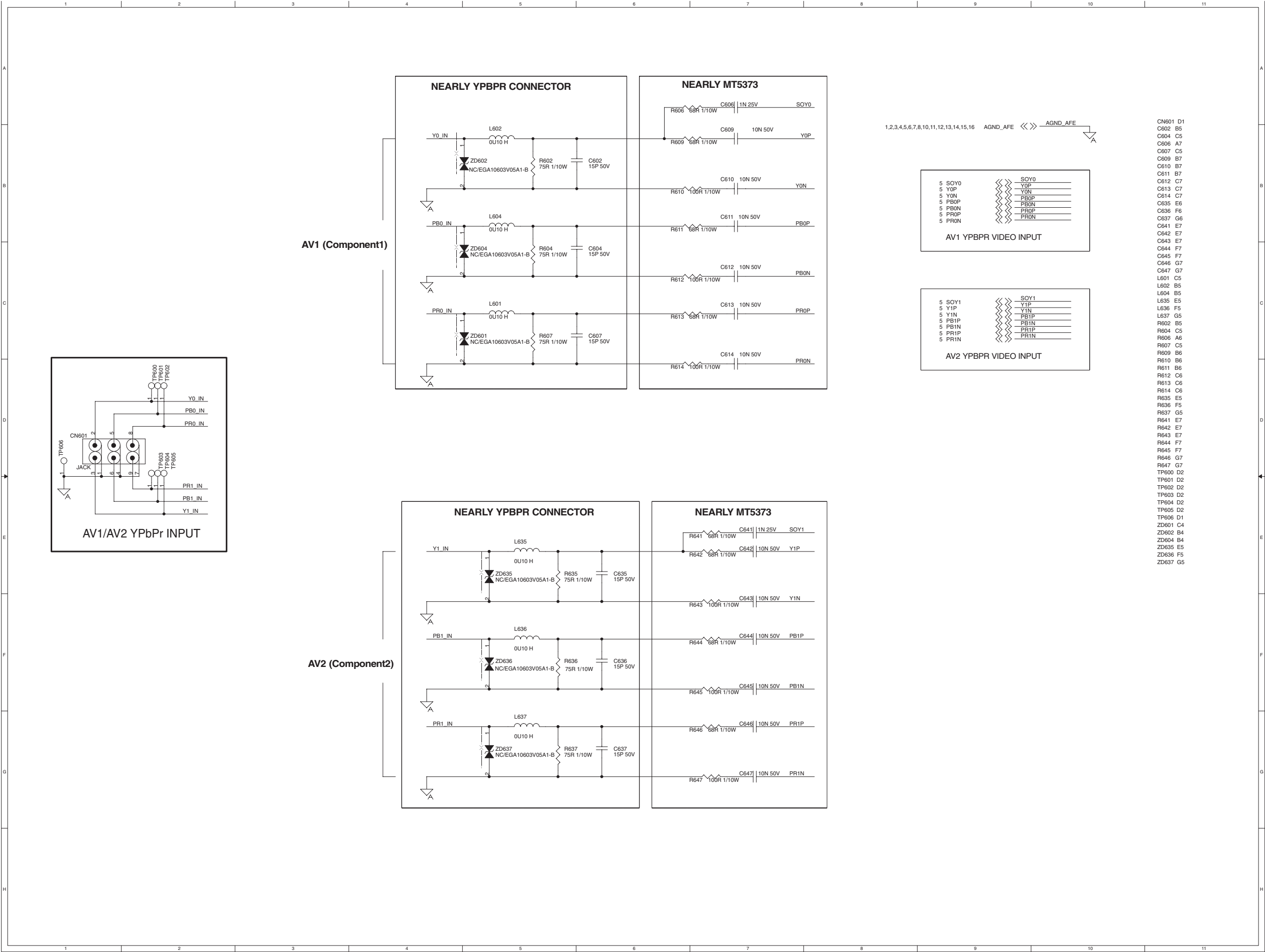
Scaler Board Schematic Diagram-FLASH/MT5373 PERIPHERAL



Scaler Board Schematic Diagram-DDR1 MEMORY



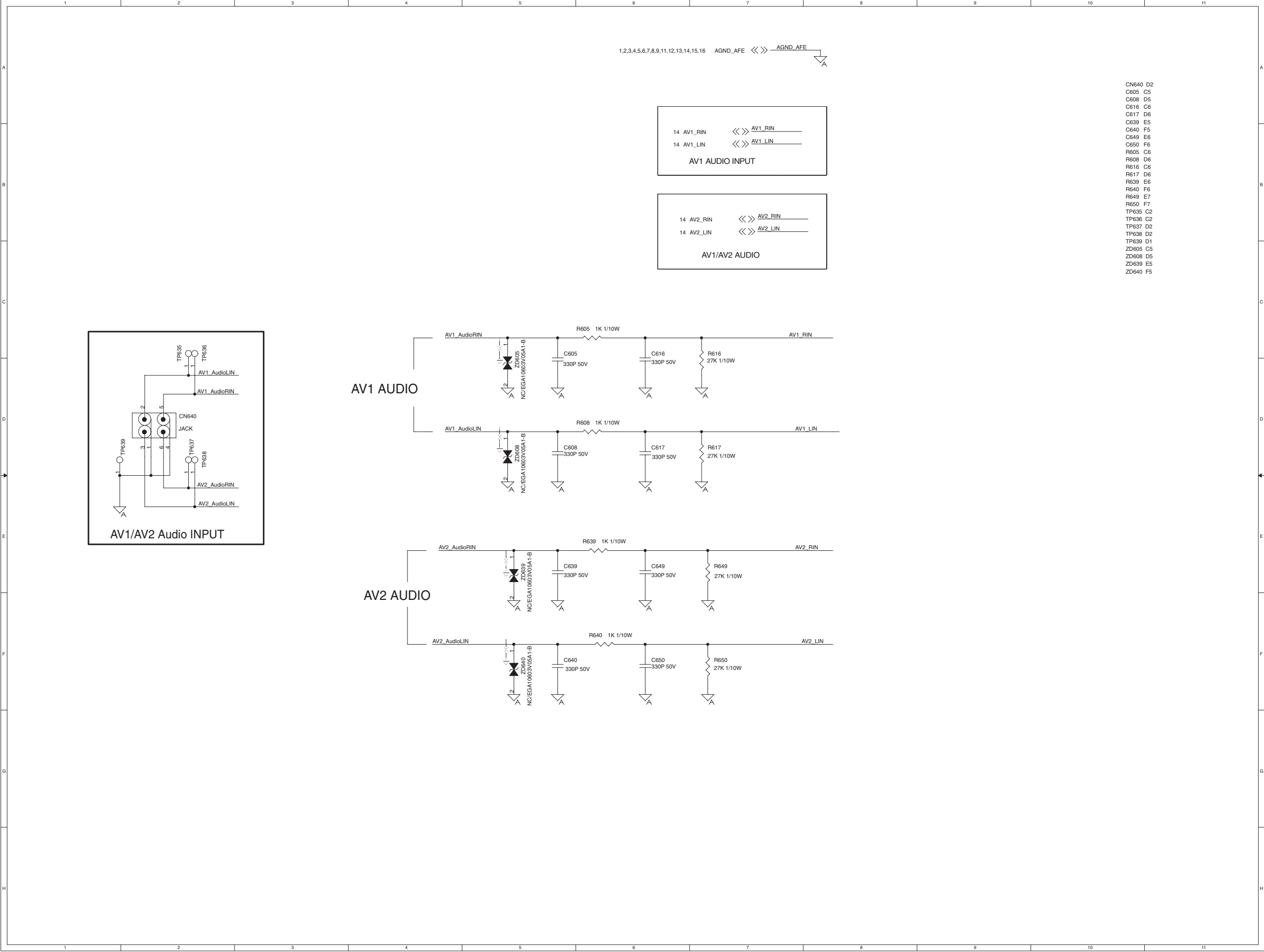
Scaler Board Schematic Diagram-AV1/AV2 YPBPR INPUT



7. Circuit Diagrams and PWB Layouts

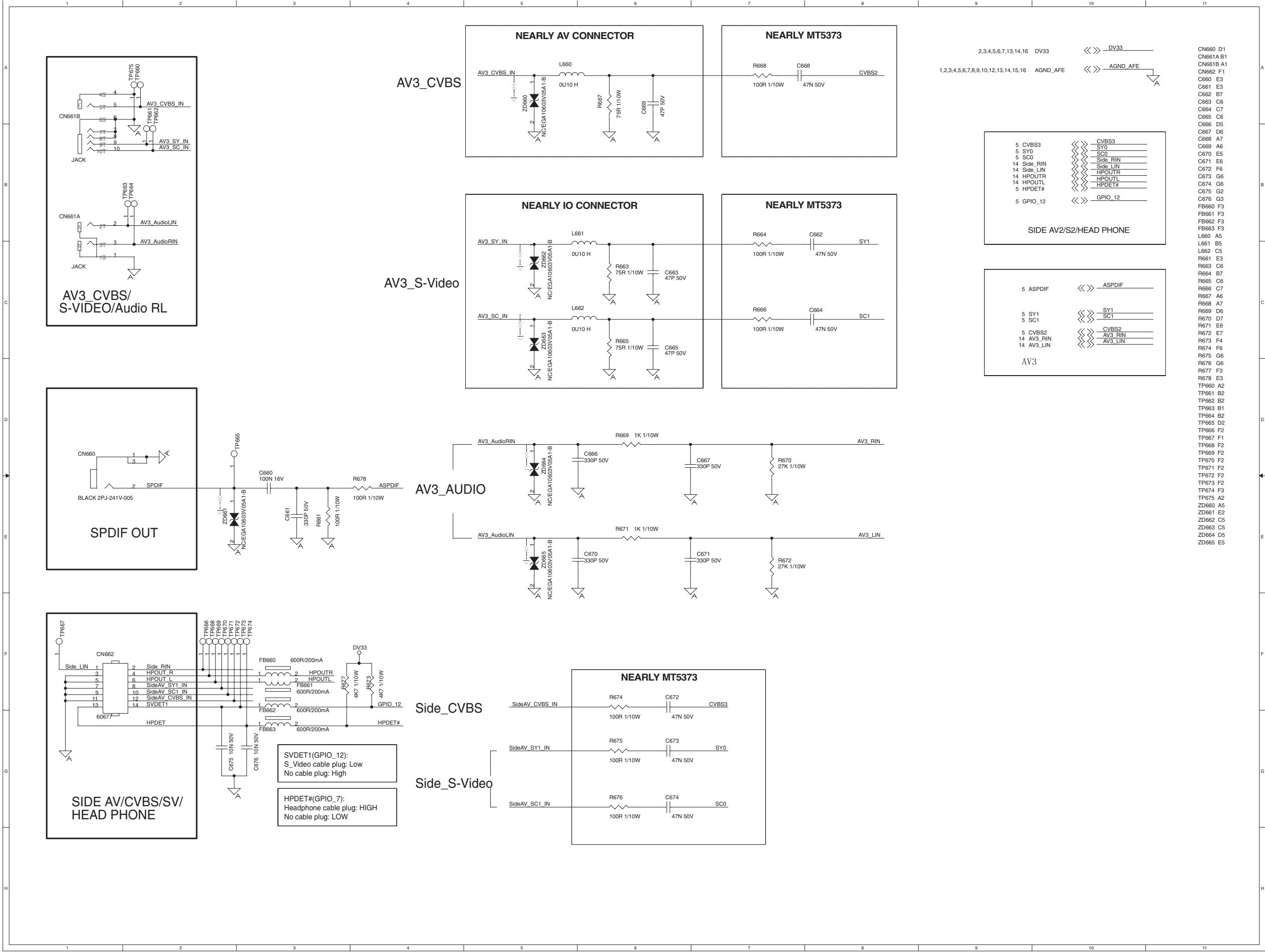
Scaler Board Schematic Diagram-AV1/AV2 AUDIO INPUT

S-10



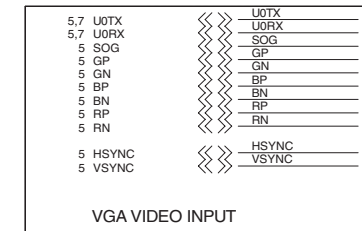
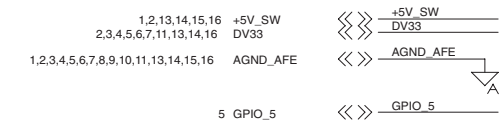
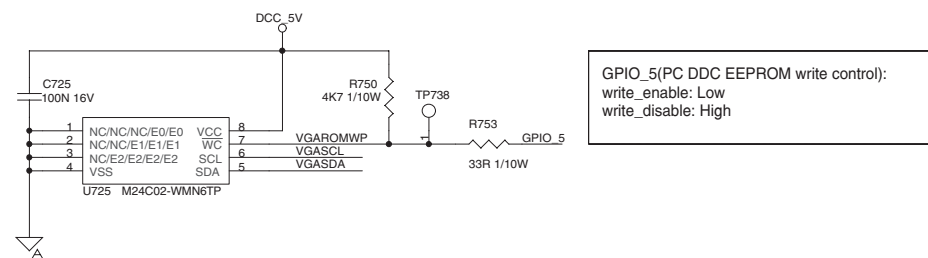
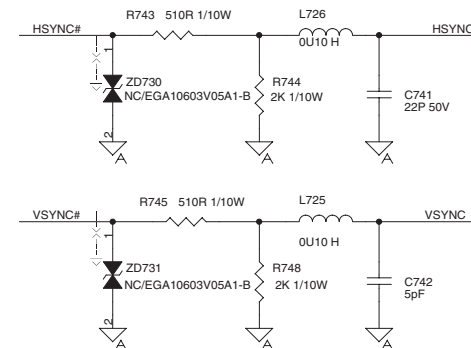
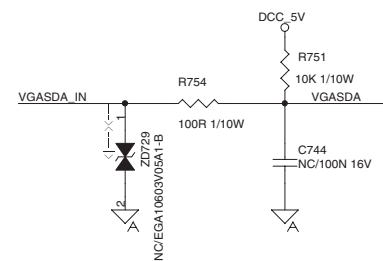
Scaler Board Schematic Diagram-SIDE AV/AV3/SPDIF OUT/PC AUDIO LINE IN

S-11



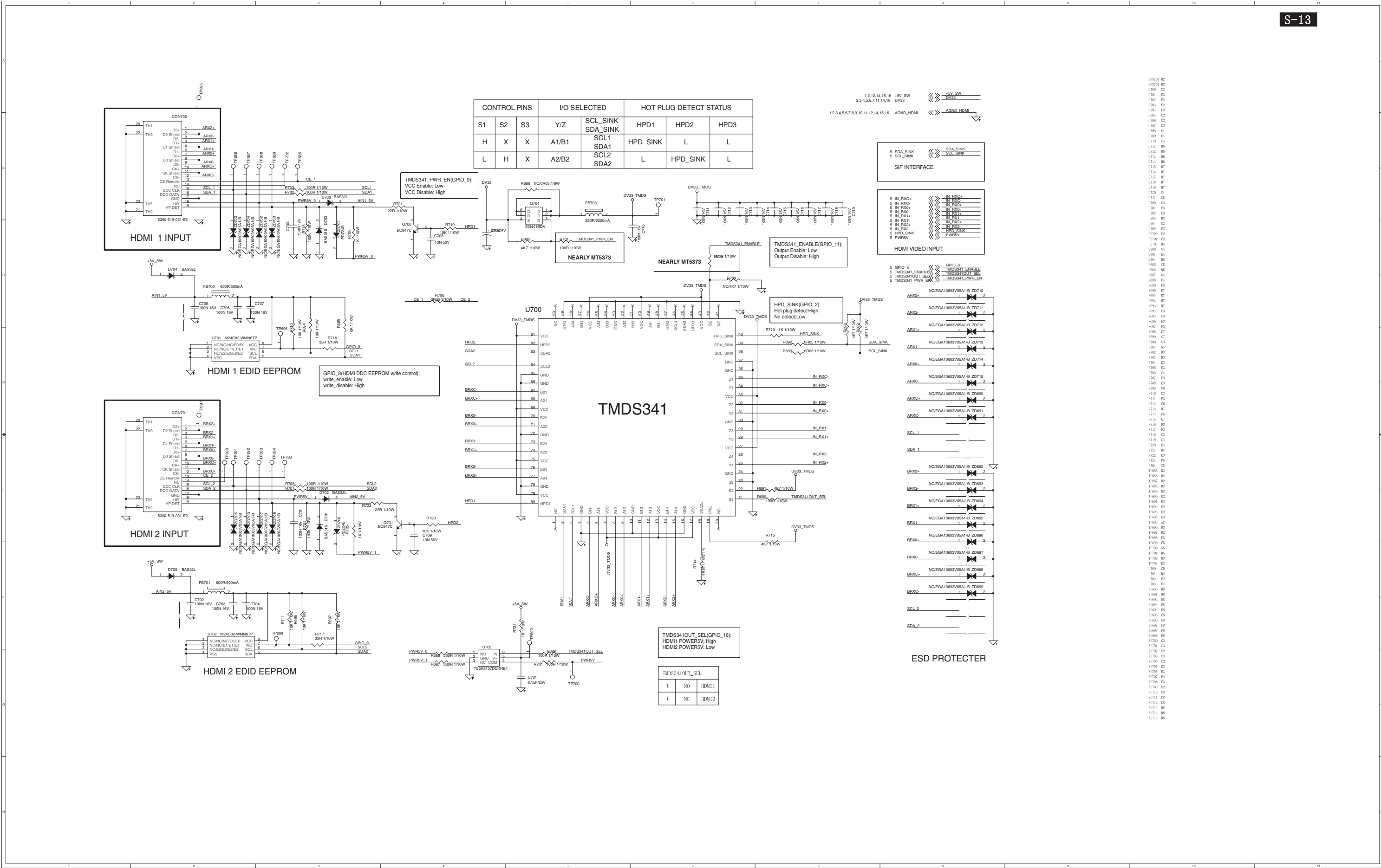
Scaler Board Schematic Diagram-VGA INPUT

S-12



CN726 B2
 D727 D1
 C725 G5
 G726 A8
 C727 B8
 C728 B4
 C729 B6
 C730 B8
 C731 B8
 C732 B8
 C733 C8
 C734 C8
 C735 D3
 C736 D4
 C737 D6
 C738 D8
 C739 D3
 C740 D4
 C741 E7
 C742 F7
 C743 F2
 C744 G2
 D725 B4
 D726 B4
 FB725 D3
 FB726 D3
 FB727 D3
 L727 E7
 R725 B6
 R726 A7
 R727 B4
 R728 B6
 R729 B7
 R731 B7
 R732 B7
 R733 C6
 R734 C7
 R735 C6
 R736 C7
 R737 D4
 R738 D4
 R739 D6
 R740 D7
 R741 D4
 R742 D4
 R743 E6
 R744 E7
 R745 E7
 R746 E2
 R747 B3
 R748 F7
 R749 E2
 R750 G7
 R751 G2
 R752 B1
 R753 G7
 R754 G2
 R755 G2
 T729 B1
 TP730 B1
 TP731 B1
 TP732 B1
 TP733 B1
 TP734 C2
 TP735 C2
 TP736 B2
 TP738 G7
 U725 G6
 D725 B3
 D726 D3
 D727 D3
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 D732 C6
 D733 C6
 D734 B6
 D735 B3
 D736 B1

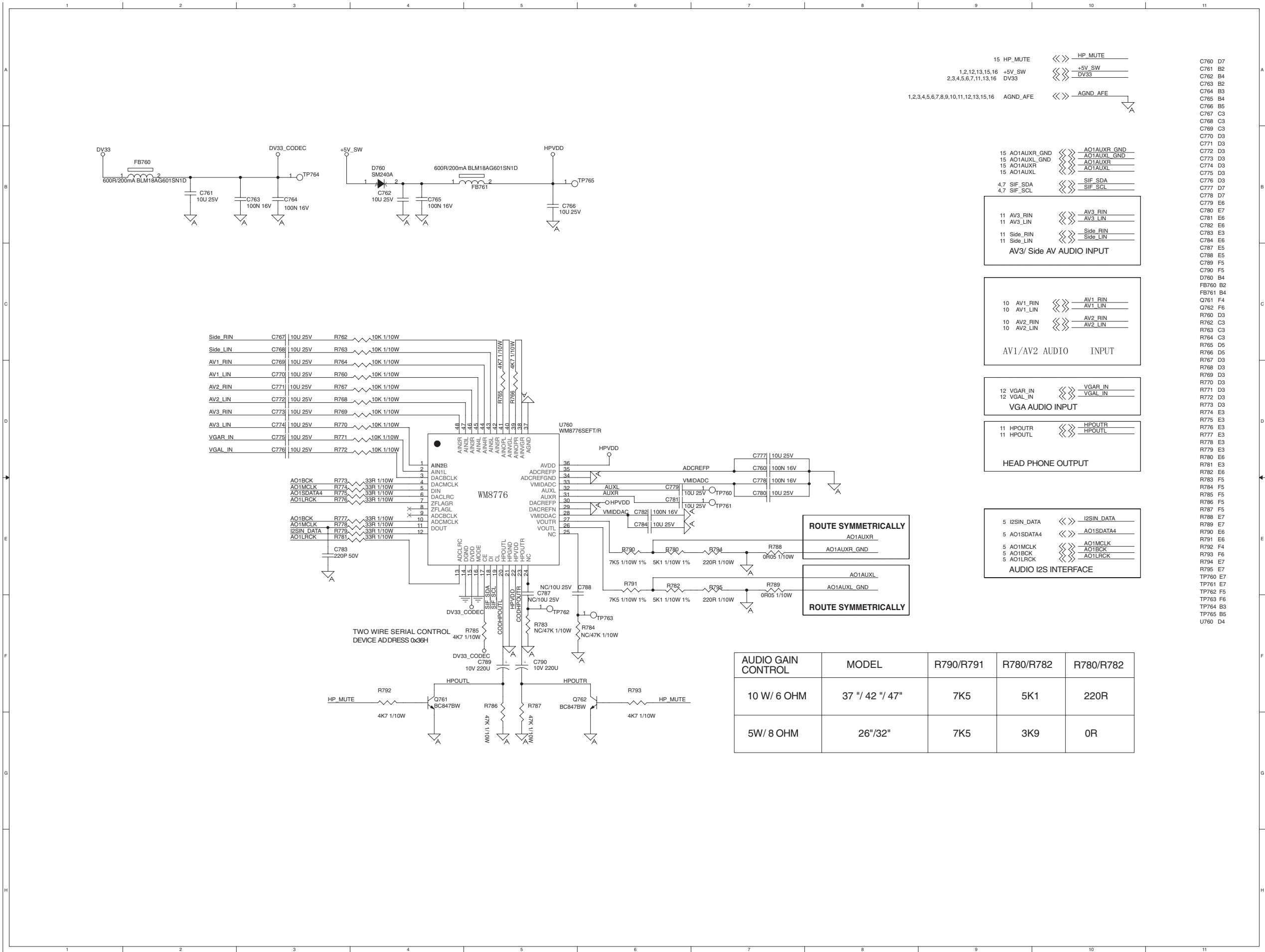
Scaler Board Schematic Diagram-HDMI INPUT



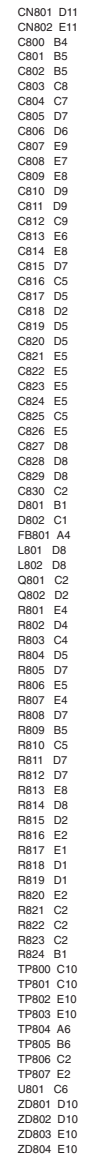
7. Circuit Diagrams and PWB Layouts

Scaler Board Schematic Diagram-AUDIO CODER

S-14

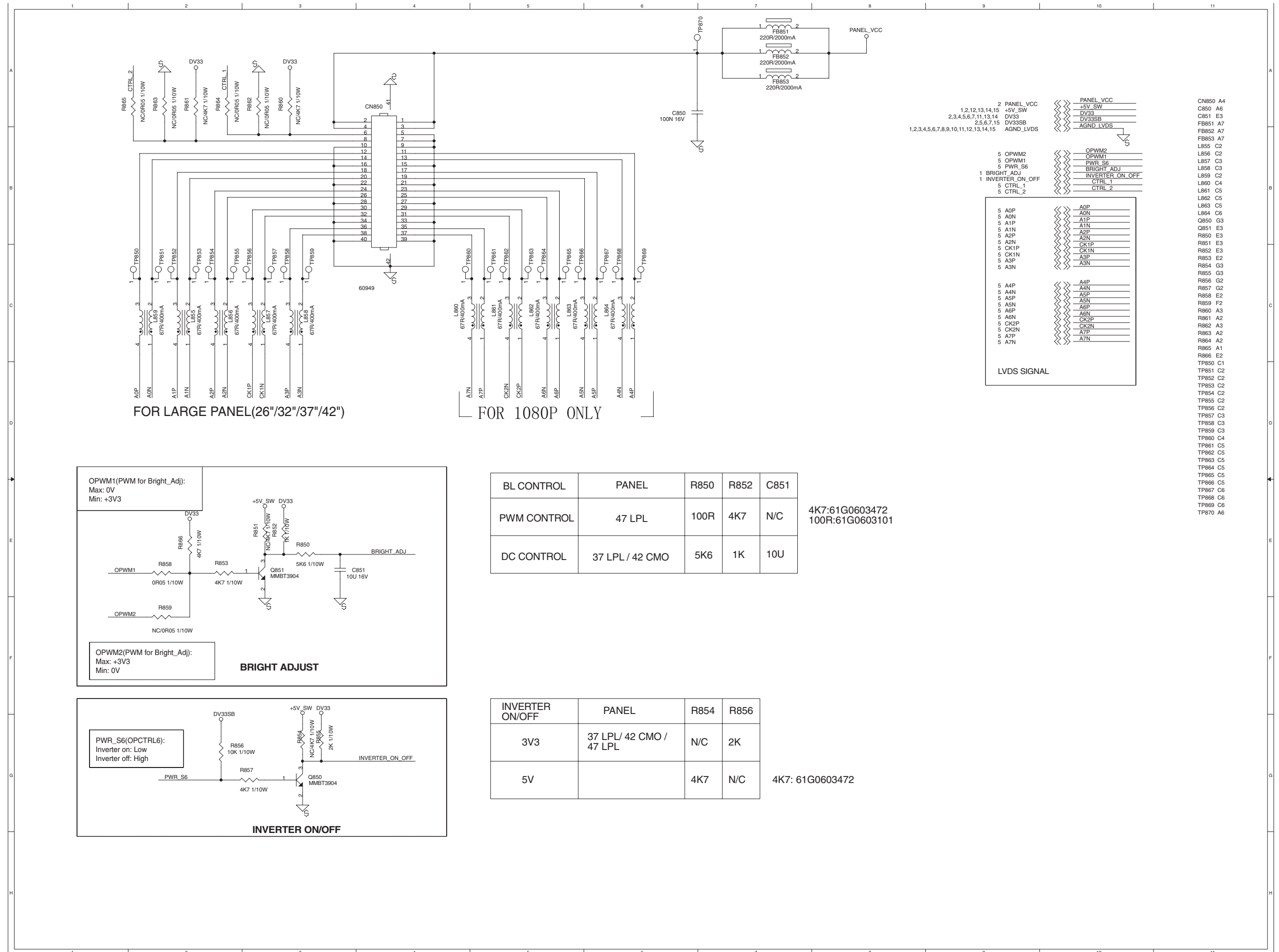


S-15



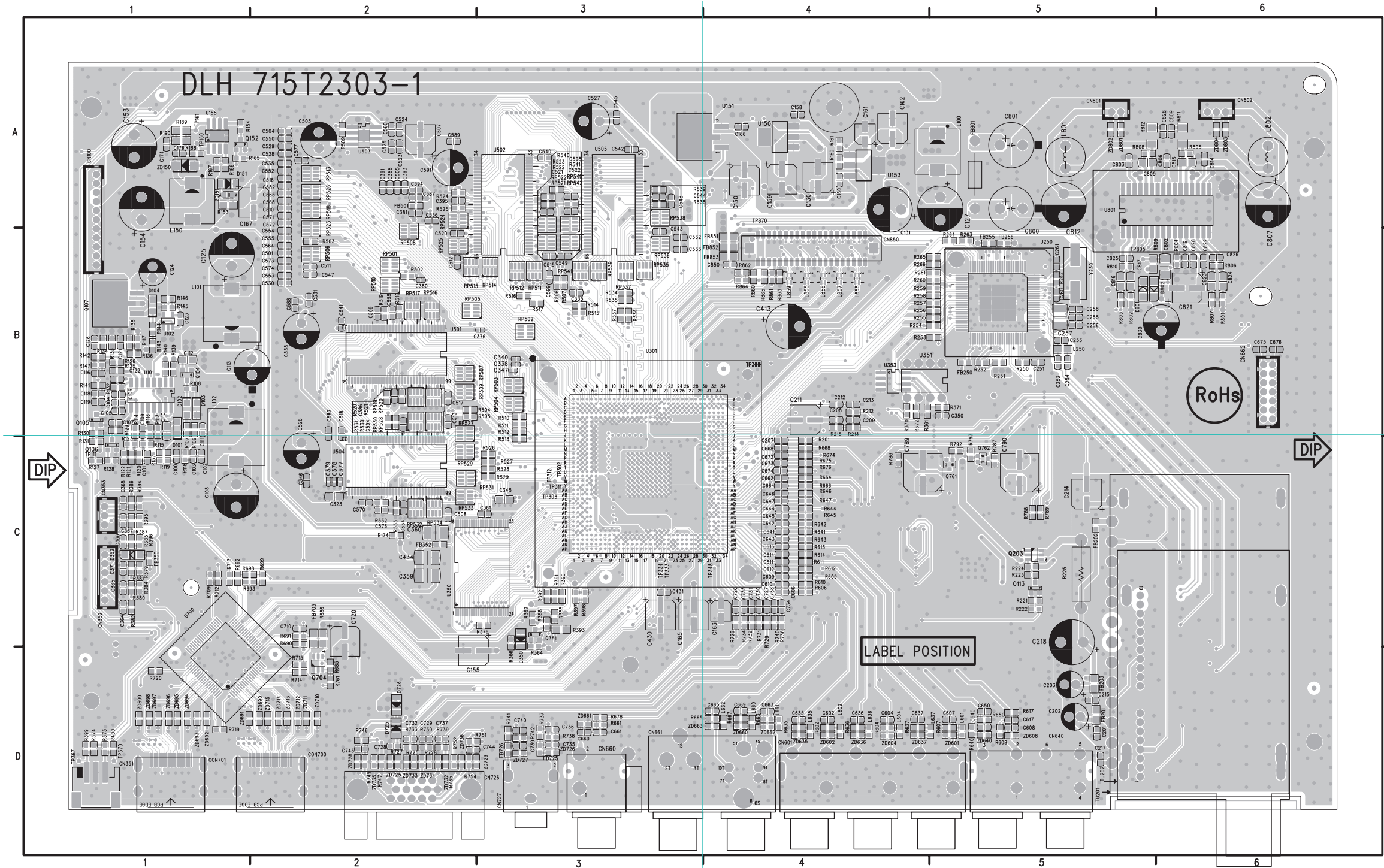
Scaler Board Schematic Diagram-LVDS OUTPUT

S-16



7.Circuit Diagrams and PWB Layouts

Scaler Board Layout-1



C100	C1	C364	C1	C571	A2	C802	B6	L637	D5	R223	C5	R527	C3	R735	D2	RP537	B3
C101	C1	C365	C1	C572	A2	C803	A5	L660	D4	R224	C5	R528	C3	R736	C4	RP538	A3
C102	C1	C366	C1	C573	B2	C805	A5	L661	D4	R225	C5	R529	C3	R737	D3	RP539	B3
C103	C1	C367	C1	C574	B2	C806	A6	L662	D4	R250	B5	R530	B2	R738	D3	RP540	A3
C104	B1	C368	C1	C576	C2	C807	A6	L801	A5	R251	B5	R531	B2	R739	D2	RP541	B3
C105	B1	C371	C1	C577	A2	C809	A6	L802	A6	R252	B5	R532	C2	R740	C4	RP542	B3
C106	B1	C376	B3	C582	A2	C812	A5	L855	B4	R253	B5	R533	C2	R741	D3	TU201	D6
C107	B1	C377	C2	C587	B2	C814	A6	L856	B4	R254	B5	R534	B3	R742	D3	TU202	D6
C108	C1	C378	C2	C588	B2	C815	A6	L857	B4	R255	B5	R535	B3	R746	D2	U101	B1
C109	B1	C379	C2	C589	A2	C816	B5	L858	B4	R256	B5	R536	B3	R747	D2	U102	B1
C110	B1	C380	B2	C591	A2	C817	B5	L859	B4	R257	B5	R537	B3	R749	D2	U150	A4
C111	B1	C381	A2	C594	B2	C819	B6	Q104	B1	R258	B5	R538	A3	R751	D2	U151	A4
C112	B1	C386	B2	C595	B2	C820	B6	Q105	B1	R259	B5	R539	A3	R752	D2	U153	A4
C113	B2	C387	A2	C598	A3	C821	B6	Q106	C1	R260	B5	R540	A3	R754	D2	U155	A1
C116	B1	C388	A2	C599	B3	C822	B6	Q107	B1	R261	B5	R541	A3	R761	D2	U250	B5
C118	B1	C391	A2	C602	D4	C823	B6	Q113	C5	R262	B5	R602	D4	R786	C4	U301	C3
C119	B1	C393	A2	C604	D4	C824	B6	Q152	A1	R263	B5	R604	D4	R787	C5	U350	C3
C121	B1	C394	A2	C606	C4	C825	B5	Q203	C5	R264	B5	R606	C4	R788	C5	U351	B4
C122	B1	C395	A2	C607	D5	C826	B6	Q351	C3	R265	B5	R607	D5	R789	C5	U353	B4
C123	B1	C413	B4	C608	D5	C828	A6	Q704	D2	R266	B5	R608	D5	R792	C5	U501	B2
C124	B1	C430	C3	C609	C4	C830	B6	Q761	C5	R358	C3	R609	C4	R793	C5	U502	A3
C125	B1	C431	C3	C610	C4	C850	B4	Q762	C5	R361	B4	R610	C4	R801	B6	U503	A2
C126	B1	C434	C2	C611	C4	CN100	A1	R107	B1	R362	C3	R611	C4	R802	B5	U504	C2
C127	A5	C501	B2	C612	C4	CN351	D1	R108	B1	R364	D3	R612	C4	R803	B5	U505	A3
C130	A4	C503	A2	C613	C4	CN352	C1	R109	B1	R366	C3	R613	C4	R804	B6	U700	D1
C131	A4	C504	A2	C614	C4	CN353	C1	R113	B1	R370	B4	R614	C4	R805	A6	U801	A6
C150	A4	C505	A2	C617	D5	CN601	D4	R114	B1	R371	B5	R617	D5	R806	B6	Y250	B5
C153	A1	C507	A2	C635	D4	CN602	A6	R122	C1	R382	C1	R644	C4	R807	B6	ZD150	A1
C154	A1	C508	C2	C636	D4	CN660	D3	R116	B1	R374	D1	R636	D4	R808	A5	ZD151	A1
C155	D2	C509	B2	C637	D4	CN661	D4	R117	B1	R375	D1	R637	D4	R809	B5	ZD601	D5
C158	A4	C510	A2	C640	D5	CN662	B6	R118	C1	R376	C3	R640	D5	R810	B5	ZD602	D4
C159	A4	C511	B2	C641	C4	CN726	D2	R119	C1	R379	C1	R641	C4	R811	A6	ZD604	D4
C160	A4	C512	B2	C642	C4	CN727	D3	R120	C1	R380	C1	R642	C4	R812	A5	ZD608	D5
C161	A4	C513	B2	C643	C4	CN801	A5	R121	C1	R381	C1	R643	C4	R860	B4	ZD635	D4
C162	A4	C515	B3	C644	C4	CN802	A6	R122	C1	R382	C1	R644	C4	R861	B4	ZD636	D4
C163	C4	C516	A2	C645	C4	CN850	B4	R123	C1	R384	C1	R645	C4	R862	B4	ZD637	D4
C165	C3	C517	B2	C646	C4	CON700	D2	R125	B1	R385	C1	R646	C4	R863	B4	ZD640	D5
C166	A4	C518	B2	C647	C4	CON701	D1	R126	B1	R386	C1	R647	C4	R864	B4	ZD660	D4
C167	A2	C520	B2	C650	D5	D101	B1	R127	C1	R387	C1	R650	D5	R865	B4	ZD661	D3
C174	A1	C521	A3	C660	D3	D102	B1	R128	C1	R388	C3	R661	D3	RP501	B2	ZD662	D4
C176	A1	C522	A3	C661	D3	D103	B1	R129	B1	R390	C3	R663	D4	RP502	B3	ZD663	D4
C201	D5	C523	A2	C662	C4	D104	B1	R130	B1	R391	C3	R664	C4	RP503	B3	ZD690	D2
C202	D5	C524	A2	C663	D4	D151	A1	R131	C1	R392	C3	R665	D4	RP504	B3	ZD691	D1
C203	D5	C525	A2	C664	C4	D350	C3	R132	B1	R393	C3	R666	D4	RP505	B2	ZD692	D1
C207	C4	C526	C2	C665	D4	D352	C1	R133	B1	R394	A1	R667	D4	RP506	B2	ZD693	D1
C208	B4	C527	A3	C668	C4	D725	D2	R134	B1	R395	C1	R668	C4	RP507	B2	ZD694	D1
C209	B4	C528	A2	C669	D4	D726	D2	R135	B1	R396	C1	R674	C4	RP508	B2	ZD695	D1
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C213	B4	C531	B2	C674	C4	FB201	D5	R139	B1	R399	D1	R678	D3	RP511	B3	ZD698	D1
C214	C5	C532	B3	C675	B6	FB202	C5	R140	B1	R400	D1	R685	D2	RP512	B3	ZD699	D1
C215	D5	C533	B3	C676	B6	FB203	D5	R141	B1	R502	B2	R686	C2	RP513	A2	ZD710	D2
C217	D5	C534	C2	C710	C2	FB250	B5	R142	B1	R503	B2	R690	C2	RP514	B3	ZD711	D2
C218	C5	C535	A2	C720	C2	FB255	B5	R143	B1	R504	B2	R691	C2	RP515	B2	ZD712	D2
C251	B5	C536	A2	C726	C4	FB256	B5	R144	B1	R505	B2	R692	C1	RP516	B2	ZD713	D2
C252	B5	C538	B2	C727	C4	FB350	C1	R145	B1	R506	B3	R693	C1	RP517	B2	ZD714	D2
C253	B5	C540	A3	C728	D2	FB352	C2	R146	B1	R507	B3	R698	C1	RP518	A2	ZD715	D2
C254	B5	C541	B2	C729	D2	FB501	A2	R147	B1	R509	A2	R699	C2	RP519	B2	ZD725	D2
C255	B5	C542	A3	C730	C4	FB703	C2	R153	A1	R510	B3	R709	C1	RP520	B2	ZD726	D3
C256	B5	C543	B3	C731	C4	FB725	D3	R154	A1	R511	B3	R712	C1	RP521	B3	ZD727	D3
C257	B5	C544	A3	C732	D2	FB726	D3	R160	A4	R512	B3	R713	C1	RP522	A3	ZD728	D2
C258	B5	C545	A3	C733	C4	FB801	A5	R161	A4	R513	C3	R714	D2	RP523	A2	ZD729	D2
C260	B5	C547	B2	C734	C4	FB851	B4	R165	A1	R514	B3	R715	D2	RP524	B2	ZD732	D2
C261	B5	C548	A3	C735	D3	FB852	B4	R166	A1	R515	B3	R719	D1	RP525	B2	ZD733	D2
C323	C2	C549	A3	C736	D3	FB853	B4	R167	A1	R516	B3	R720	D1	RP526	A2	ZD734	D2
C335	B3	C550	A2	C737	D2	L100	A5	R174	C2	R517	B3	R725	D2	RP527	B2	ZD735	D2
C338	B3	C552	A2	C738	C4	L101	B1	R188	A1	R518	B2	R726	C4	RP528	B2	ZD736	D2
C340	B3	C553	B2	C739	D3	L102	C1	R189	A1	R519	B2	R727	D2	RP529	C2	ZD801	A5
C345	C3	C554	B2	C740	D3	L150	A1	R190	A1	R520	B2	R728	D2	RP530	B2	ZD802	A5
C346	C2	C555	B2	C743	D2	L250	B5	R201	C4	R521	B2	R729	C4	RP531	C2	ZD803	A6
C347	B3	C560	A2	C744	D2	L601	D5	R212	B4	R522	A3	R730	D2	RP532	C2	ZD804	A6
C350	B5	C564	B2	C789	C4	L602	D4	R214	B4	R523	A3	R731	C4	RP533	C2		
C359	C2	C565	A2	C790	C5	L604	D4	R221	B4	R524	A2	R732	C4	RP534	C2		
C360	C2	C568	A2	C800	A5	L635	D4	R225	C5	R525	A2	R733	D2	RP535	B3		
C361	C3	C570	C2	C801	A5	L636	D4	R222	C5	R526	C3	R734	C4	RP536	B3		

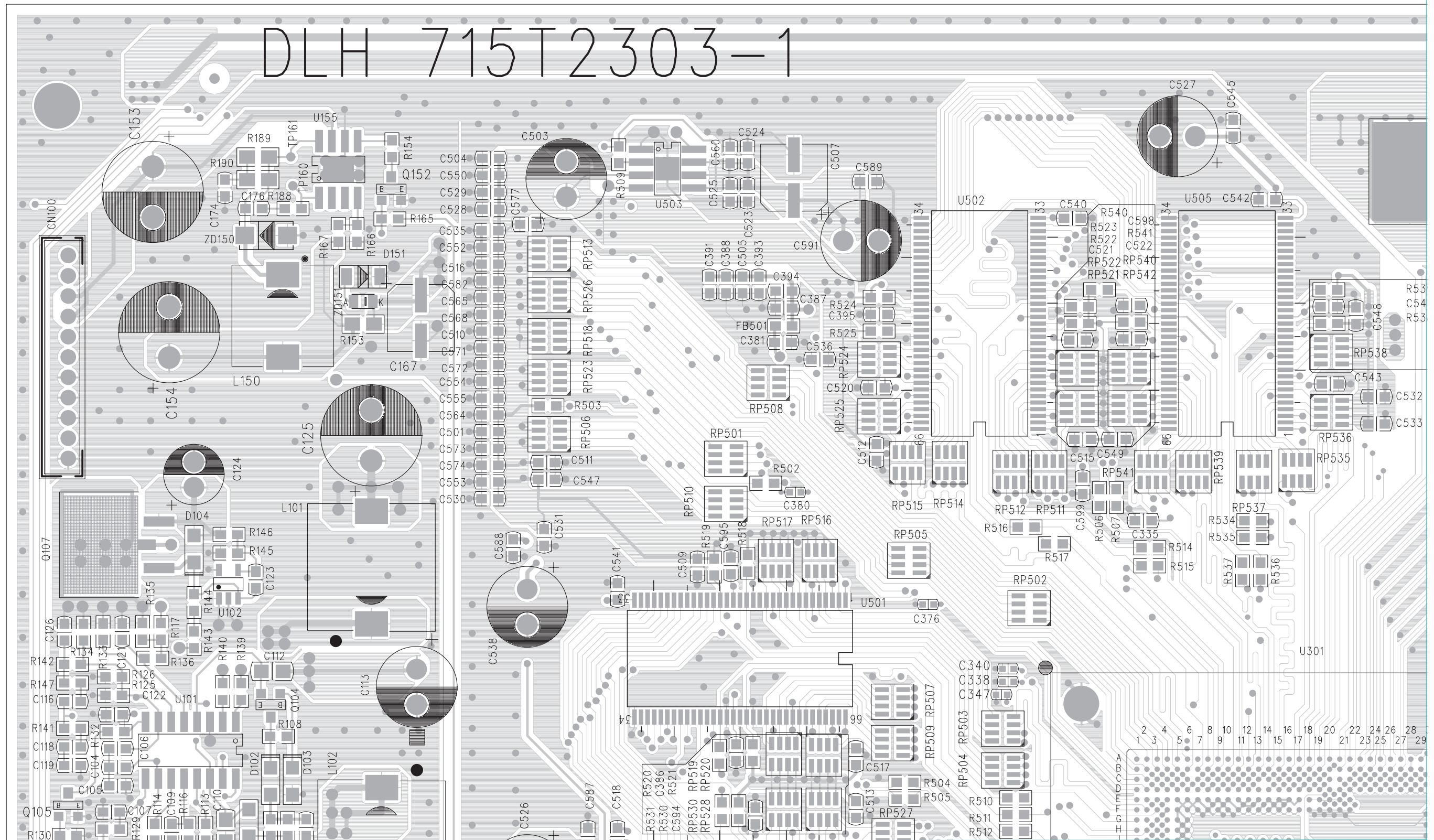
7. Circuit Diagrams and PWB Layouts

Scaler Board Layout(TOP LEFT)

3

A

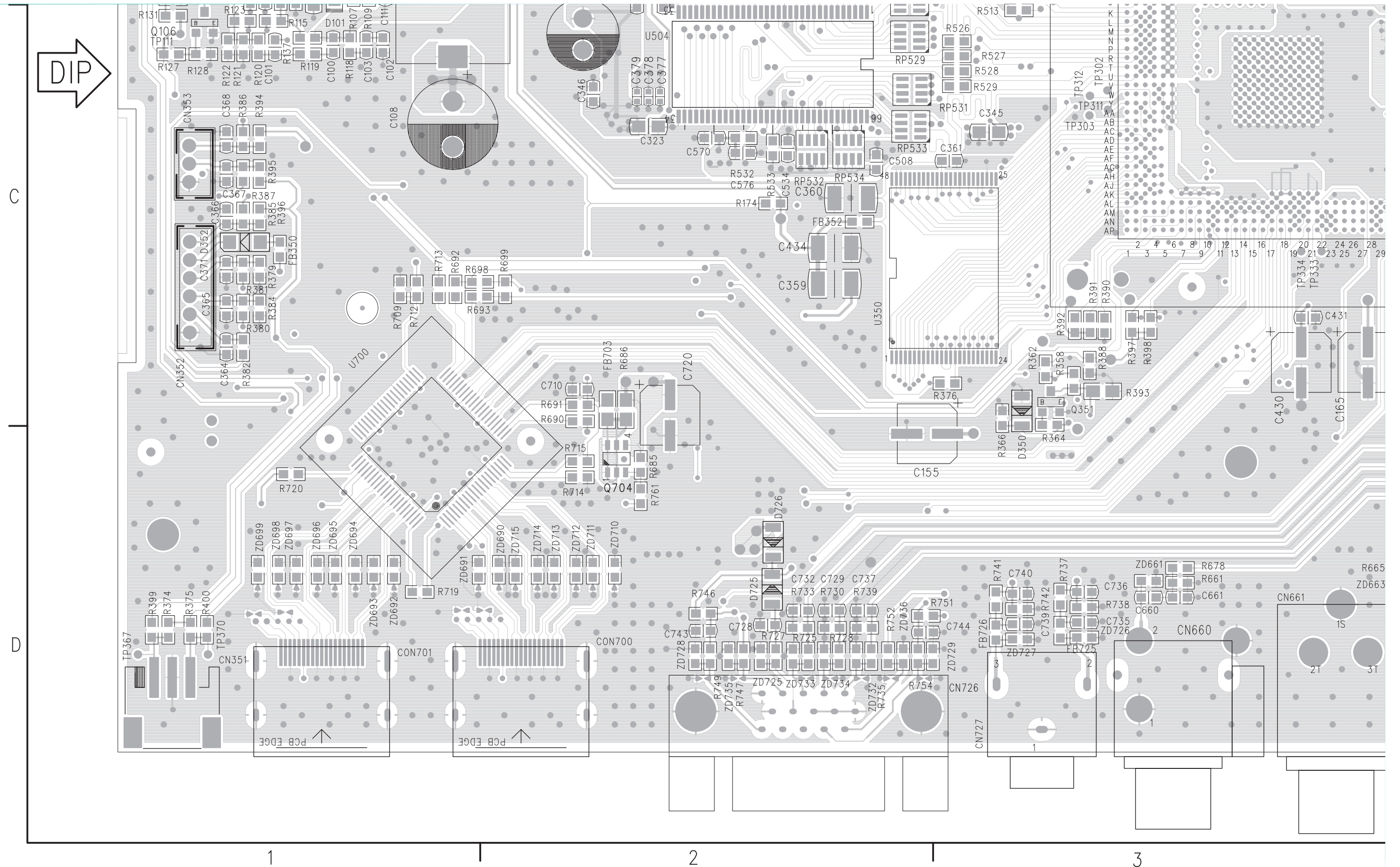
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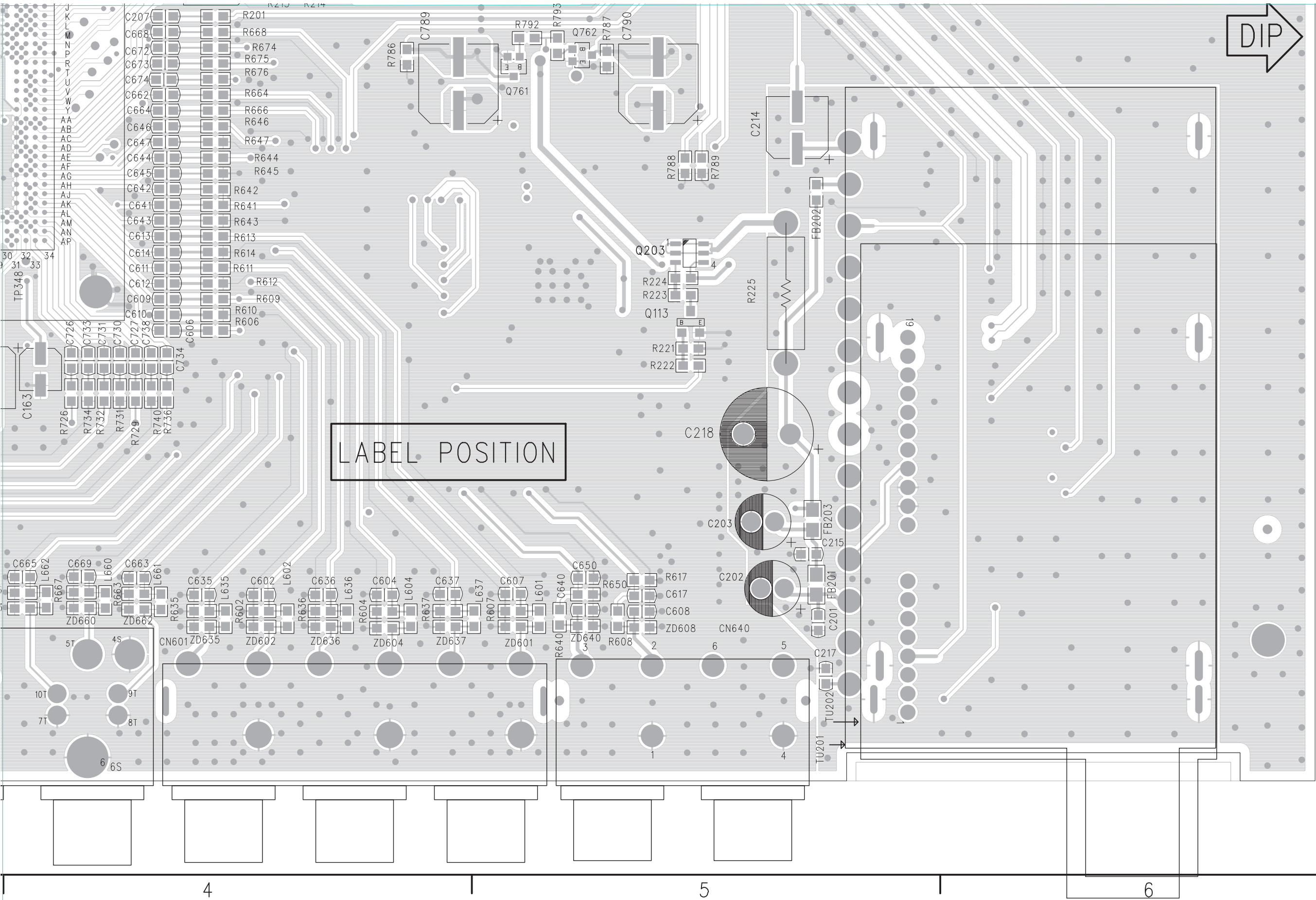


7. Circuit Diagrams and PWB Layouts

Scaler Board Layout(BOTTOM LEFT)

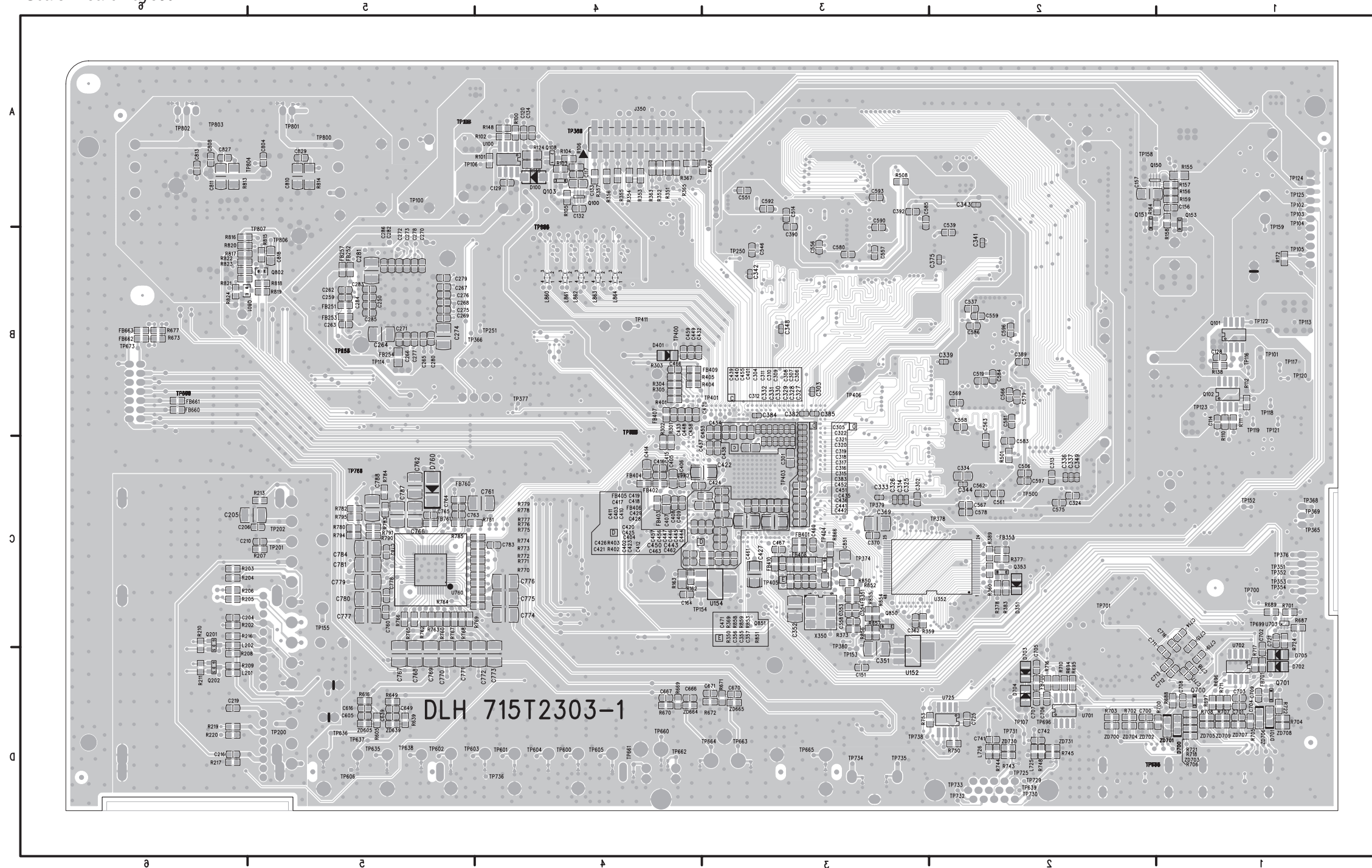


Scaler Board Layout(BOTTOM RIGHT)



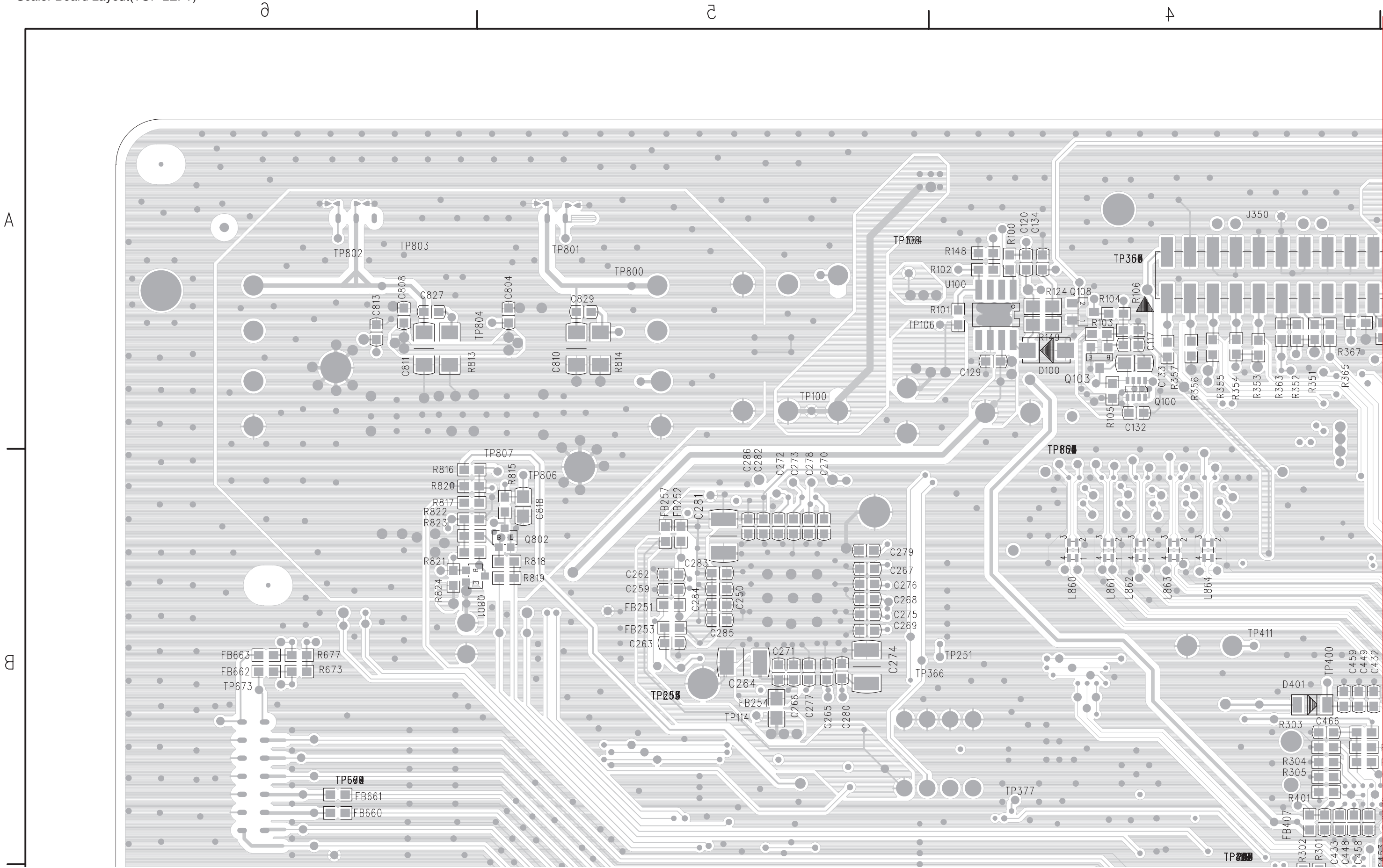
7. Circuit Diagrams and PWB Layouts

Scaler Board Layout-2



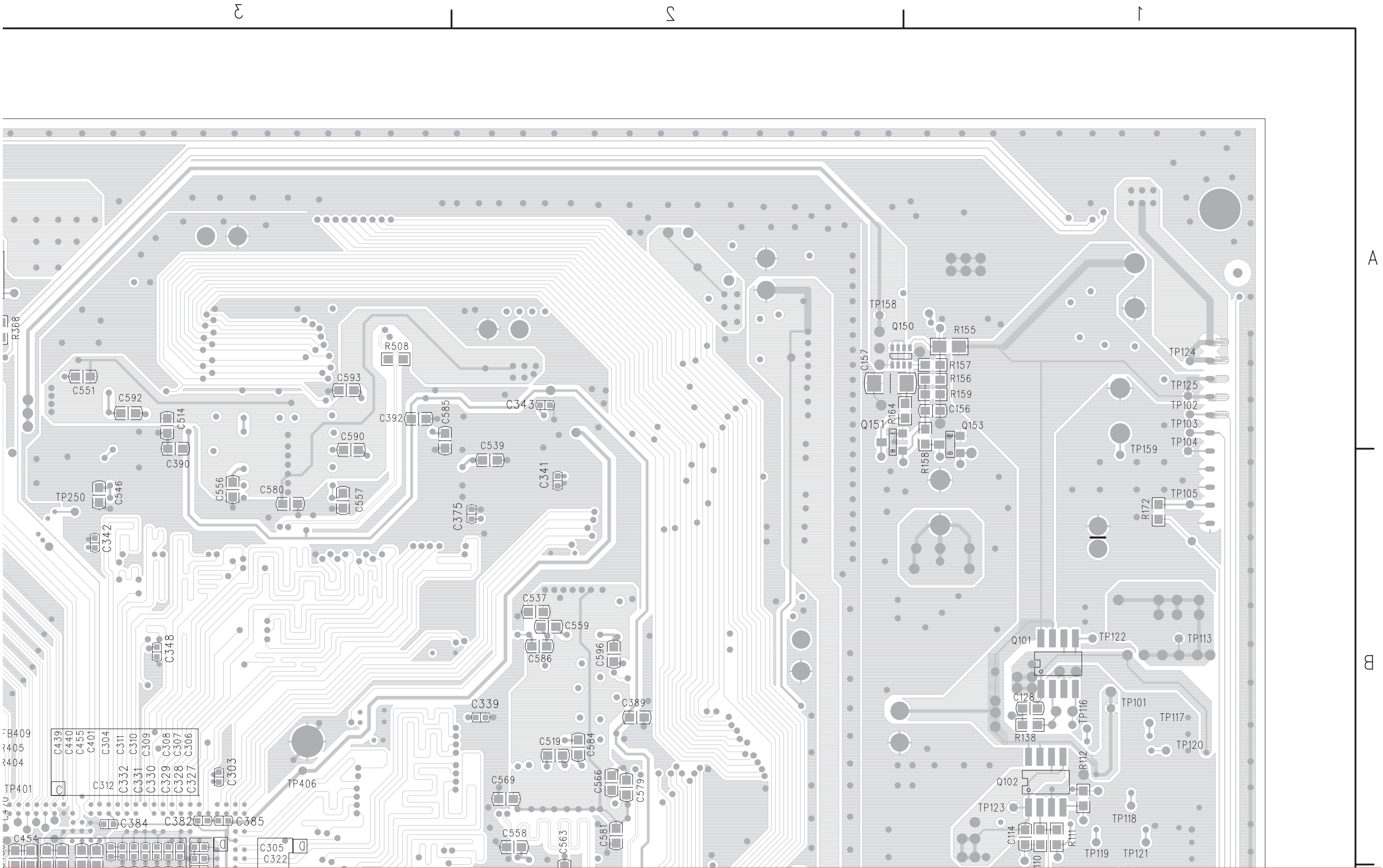
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C120	A4	C316	C3	C414	C4	C551	A3	C762	C5	FB408	C3	R162	C4	R672	D3	R790	C5
C128	B1	C317	C3	C415	C4	C556	B3	C763	C5	FB409	B4	R163	C4	R673	B6	R791	C5
C129	A4	C318	C3	C416	C4	C557	B3	C764	C5	FB410	C3	R164	A1	R677	B6	R794	C5
C132	A4	C319	C3	C417	C3	C558	B2	C765	C5	FB660	B6	R172	B1	R687	C1	R795	C5
C133	A4	C320	C3	C418	C3	C559	B2	C766	C5	FB661	B6	R202	C6	R688	D1	R813	A6
C134	A4	C321	C3	C419	C3	C561	C2	C767	D5	FB662	B6	R203	C6	R689	C1	R814	A5
C151	D3	C322	B3	C420	C3	C562	C2	C768	D5	FB663	B6	R204	C6	R694	D2	R815	B5
C156	A1	C324	C2	C421	C4	C563	C2	C769	D5	FB700	D2	R205	C6	R695	D2	R816	B6
C157	A2	C325	C3	C422	C3	C566	B2	C770	D5	FB701	D1	R206	C6	R696	D1	R817	B6
C164	C4	C326	C3	C423	C3	C567	C2	C771	D5	FB760	C5	R207	C5	R697	D1	R818	B5
C204	C6	C327	C3	C424	C4	C569	B2	C772	D4	FB761	C5	R208	D6	R700	D1	R819	B5
C205	C5	C328	C3	C425	C3	C575	C2	C773	D4	J350	A4	R209	D6	R701	C1	R820	B6
C206	C5	C329	C3	C426	C4	C578	C2	C774	C4	JP15	D6	R210	C6	R702	D2	R821	B6
C210	C5	C330	C3	C427	C3	C579	B2	C775	C4	L201	D6	R211	D6	R703	D2	R822	B6
C216	D6	C331	C3	C428	C3	C580	B3	C776	C4	L202	C6	R213	C5	R704	D1	R823	B6
C219	D6	C332	C3	C429	C3	C581	B2	C777	C5	L725	D2	R216	C6	R705	D1	R824	B6
C250	B5	C333	C3	C432	B4	C583	C2	C778	C5	L726	D2	R217	D6	R706	D1	R850	C3
C259	B5	C334	C2	C433	B4	C584	B2	C779	C5	L860	B4	R219	D6	R707	D1	R851	C3
C262	B5	C336	C2	C435	C3	C585	A3	C780	C5	L861	B4	R220	D6	R708	D1	R852	C3
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C264	B5	C339	B2	C437	C3	C590	B3	C782	C5	L863	B4	R302	C4	R711	D1	R854	C3
C265	B5	C341	B2	C438	C3	C592	A3	C783	C4	L864	B4	R303	B4	R716	D2	R855	C3
C266	B5	C342	B3	C439	B3	C593	A3	C784	C5	Q100	A4	R304	B4	R717	D1	R856	C3
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C268	B5	C344	C2	C441	C3	C597	C2	C788	C5	Q102	B1	R350	C3	R721	D1	R858	C3
C269	B5	C348	B3	C442	C3	C805	D5	C804	A5	Q103	A4	R351	A4	R722	D1	R859	C3
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C271	B5	C351	D3	C444	C3	C639	D5	C810	A5	Q150	A2	R353	A4	R743	D2	U100	A4
C272	B5	C352	C3	C445	C3	C649	D5	C811	A6	Q151	A2	R354	A4	R744	D2	U152	D3
C273	B5	C353	C3	C446	C3	C666	D4	C813	A6	Q153	B1	R355	A4	R745	D2	U154	C3
C274	B5	C354	C3	C447	C3	C667	D4	C818	B5	Q201	C6	R356	A4	R748	D2	U352	C2
C275	B5	C355	C3	C448	B4	C670	D3	C827	A6	Q202	D6	R357	A4	R750	D2	U701	D1
C276	B5	C356	C3	C449	B4	C671	D3	C829	A5	Q353	C2	R359	C3	R753	D2	U702	D1
C277	B5	C357	C3	C450	C3	C700	D2	C851	C3	Q700	D1	R360	C2	R760	C5	U703	C1
C278	B5	C358	C3	C451	C3	C701	D1	D100	A4	Q701	D1	R363	A4	R762	C5	U725	D2
C279	B5	C362	C3	C452	C3	C702	D1	D351	C2	Q801	B6	R365	A4	R763	C5	U760	C5
C280	B5	C369	C3	C453	B3	C703	D1	D401	B4	Q802	B5	R367	A4	R764	C5	U350	C3
C281	B5	C370	C3	C454	B3	C704	D1	D700	D1	Q850	C3	R368	A3	R765	C5	ZD605	D5
C282	B5	C375	B2	C455	B3	C705	D2	D701	D1	Q851	C3	R369	C3	R766	C5	ZD639	D5
C283	B5	C382	B3	C456	C3	C706	D2	D702	D1	R100	A4	R373	C3	R767	C5	ZD664	D4
C284	B5	C383	C3	C457	C3	C707	D2	D703	D2	R101	A4	R377	C2	R768	C5	ZD665	D3
C285	B5	C384	B3	C458	B4	C708	D1	D704	D2	R102	A4	R378	C2	R769	C5	ZD700	D2
C286	B5	C385	B3	C459	B4	C709	D1	D705	D1	R103	A4	R383	C2	R770	C4	ZD701	D2
C301	C3	C389	B2	C460	C3	C711	D1	D760	C5	R104	A4	R389	C2	R771	C4	ZD702	D1
C302	C3	C390	B3	C461	C3	C712	D1	FB251	B5	R105	A4	R401	B4	R772	C4	ZD703	D1
C303	B3	C392	A3	C462	C3	C713	D1	FB252	B5	R106	A4	R402	C3	R773	C4	ZD704	D2
C304	B3	C401	B3	C463	C3	C714	C1	FB253	B5	R110	B1	R403	C3	R774	C4	ZD705	D1
C305	B3	C402	C3	C465	C3	C715	D1	FB254	B5	R111	B1	R404	B4	R775	C4	ZD706	D1
C306	B3	C403	C4	C466	B4	C716	C1	FB257	B5	R112	B1	R405	B4	R776	C4	ZD707	D1
C307	B3	C404	C3	C467	C3	C717	D1	FB351	C3	R124	A4	R501	C2	R777	C4	ZD708	D1
C308	B3	C405	C4	C470	B4	C718	D1	FB353	C2	R138	B1	R508	A3	R778	C4	ZD709	D1
C309	B3	C406	C4	C471	C3	C719	D1	FB401	C3	R148	A4	R605	D5	R779	C4	ZD730	D2
C310	B3	C407	C4	C506	C2	C721	C1	FB402	C4	R149	A4	R616	D5	R780	C5	ZD731	D2
C311	B3	C408	C4	C514	A3	C725	D2	FB403	C4	R155	A1	R639	D5	R781	C4		
C312	C3	C409	C4	C519	B2	C741	D2	FB404	C4	R156	A1	R649	D5	R782	C5		
C313	C2	C410	C3	C537	B2	C742	D2	FB405	C3	R157	A1	R669	D4	R783	C5		

Scaler Board Layout(TOP LEFT)



7. Circuit Diagrams and PWB Layouts

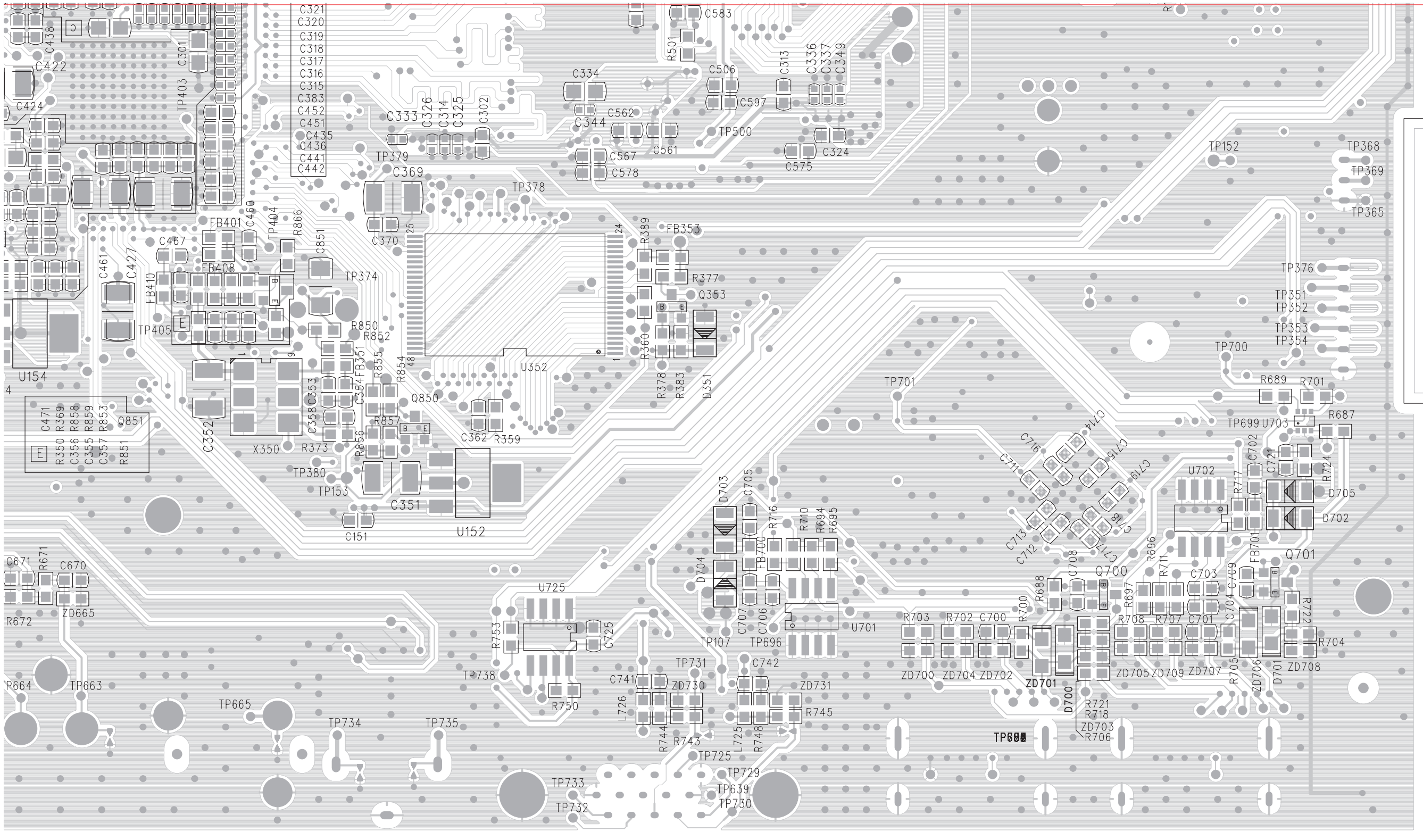
Scaler Board Layout-2(TOP RIGHT)



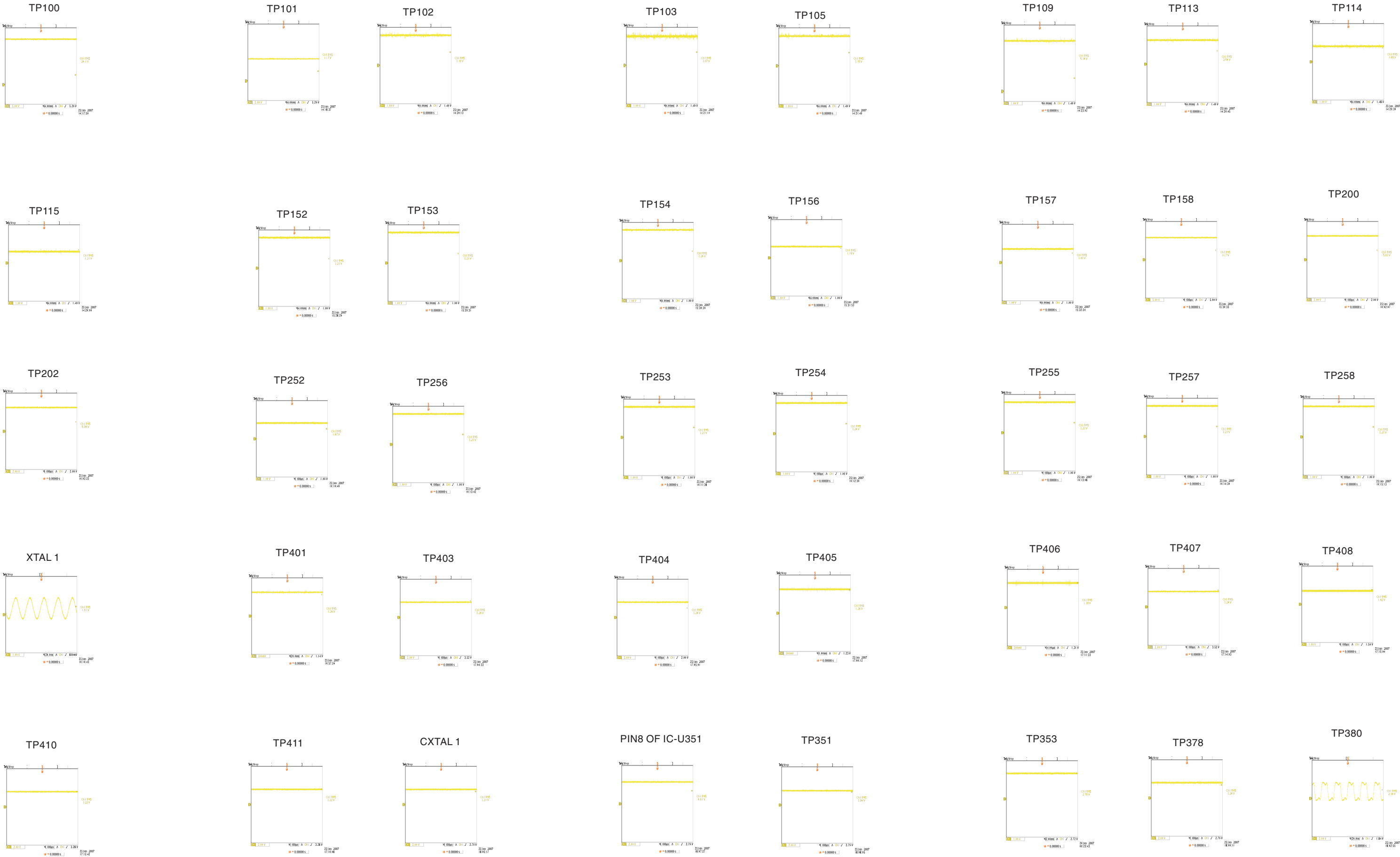
DLH 715T2303-1

7. Circuit Diagrams and PWB Layouts

Scaler Board Layout-2(BUTTON RIGHT)

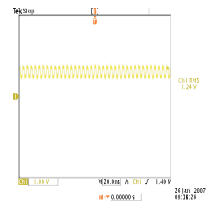


Test Point

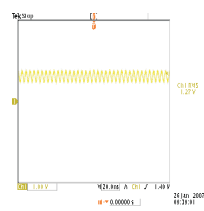


7. Circuit Diagrams and PWB Layouts

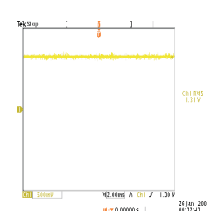
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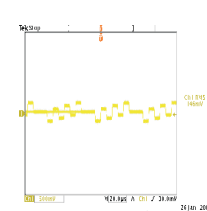
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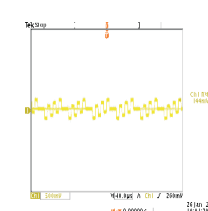
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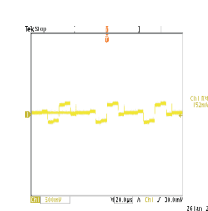
PB0_IN



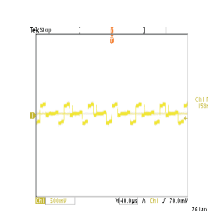
PB1_IN



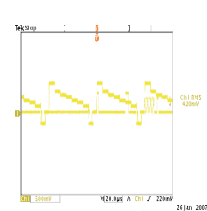
PR0_IN



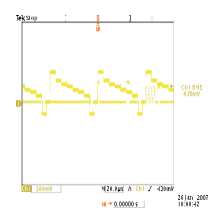
PR1_IN



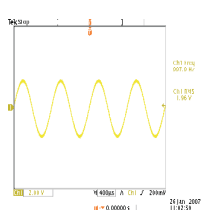
Y0_IN



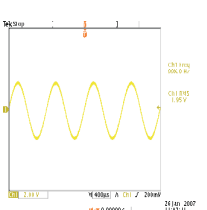
Y1_IN



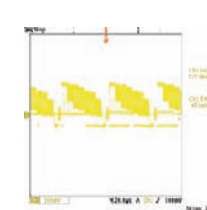
AV1_RIN



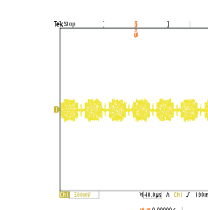
AV2_LIN



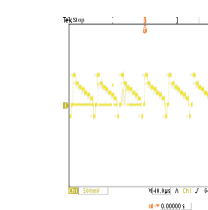
AV3_CVBS_IN



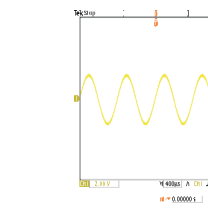
AV3_SC_IN



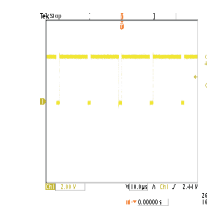
AV3_SY_IN



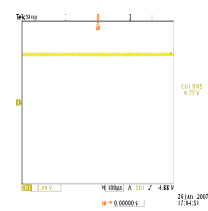
AV3_AUDIO-IN



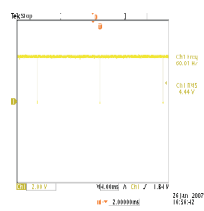
HSYNC#



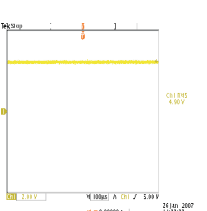
PIN8 OF U725



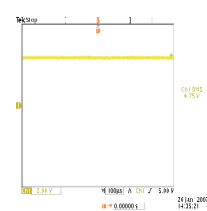
VSYNC#



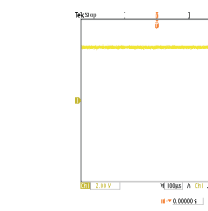
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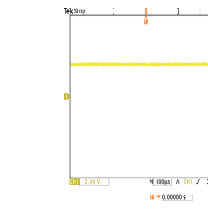
TP694



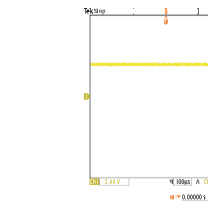
TP699



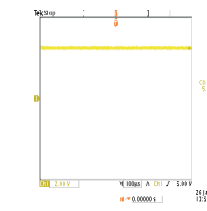
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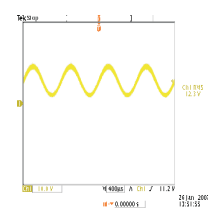
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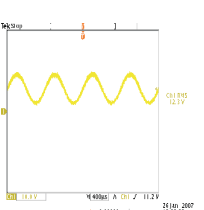
TP765



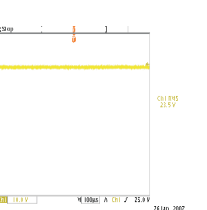
TP800



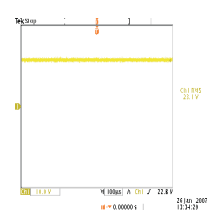
TP803



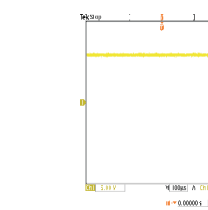
TP804



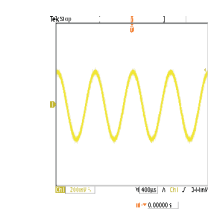
TP805



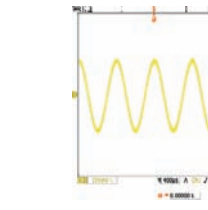
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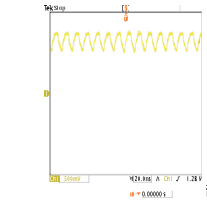
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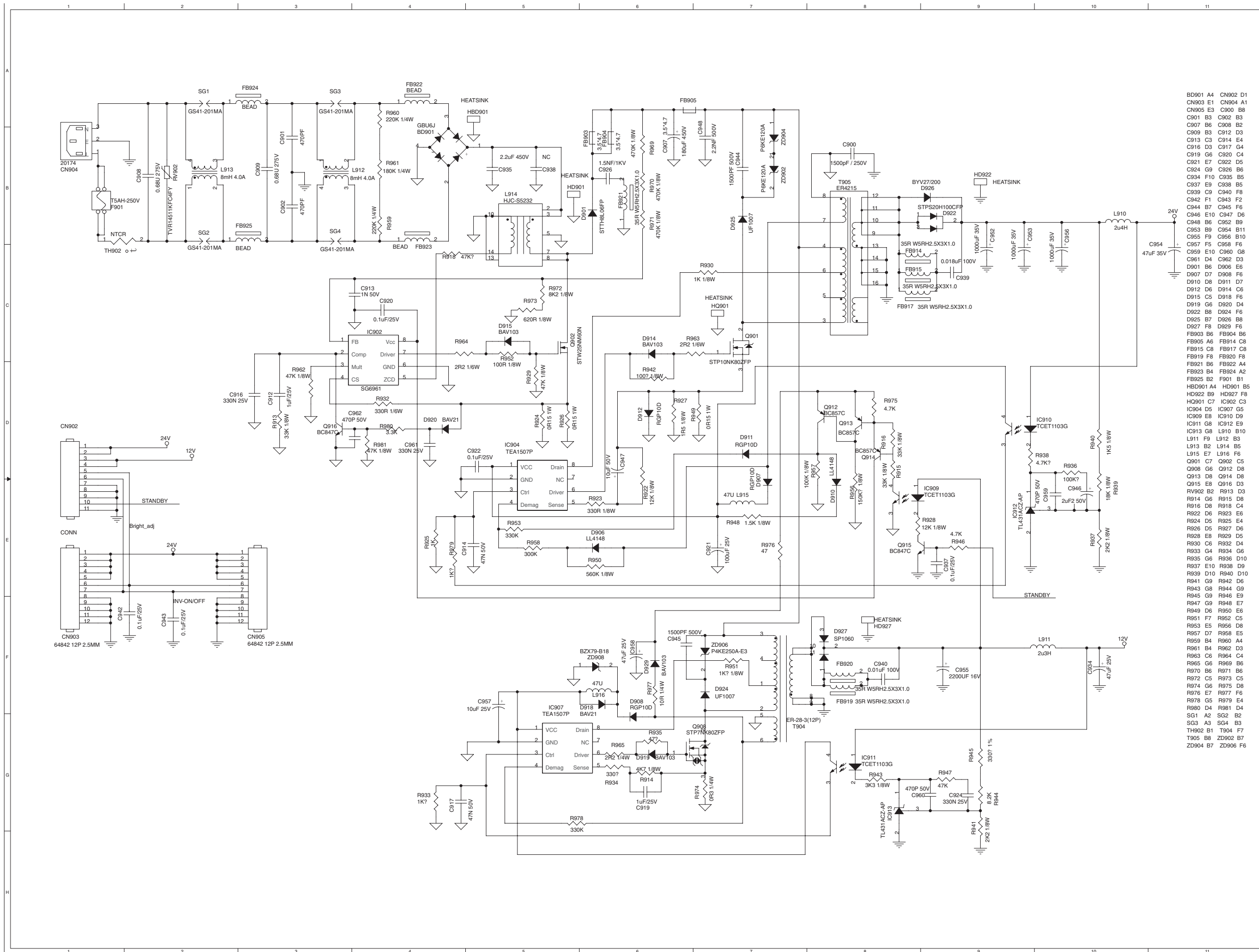
TP808



TP856

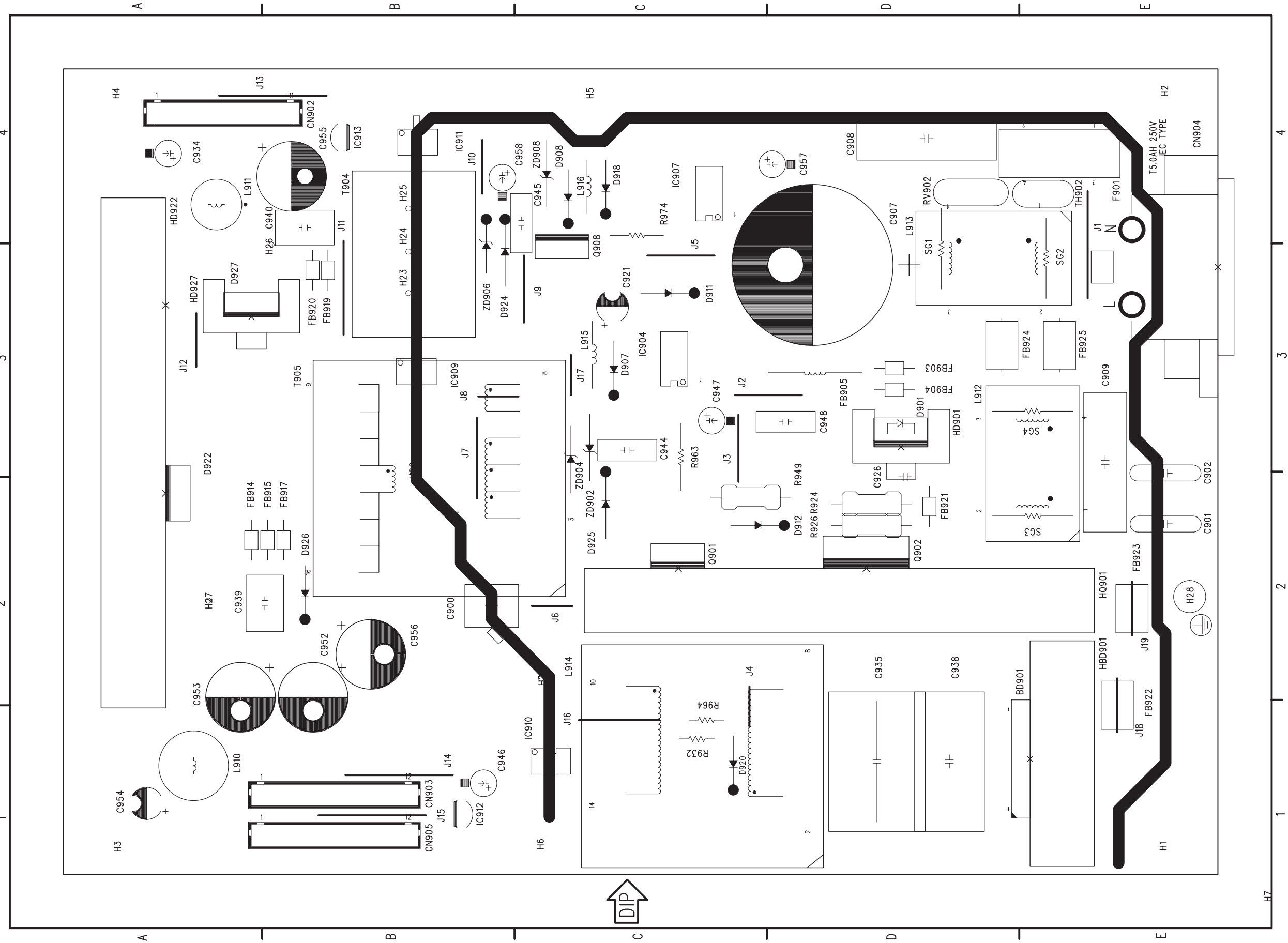


Power Board Schematic Diagram(37")



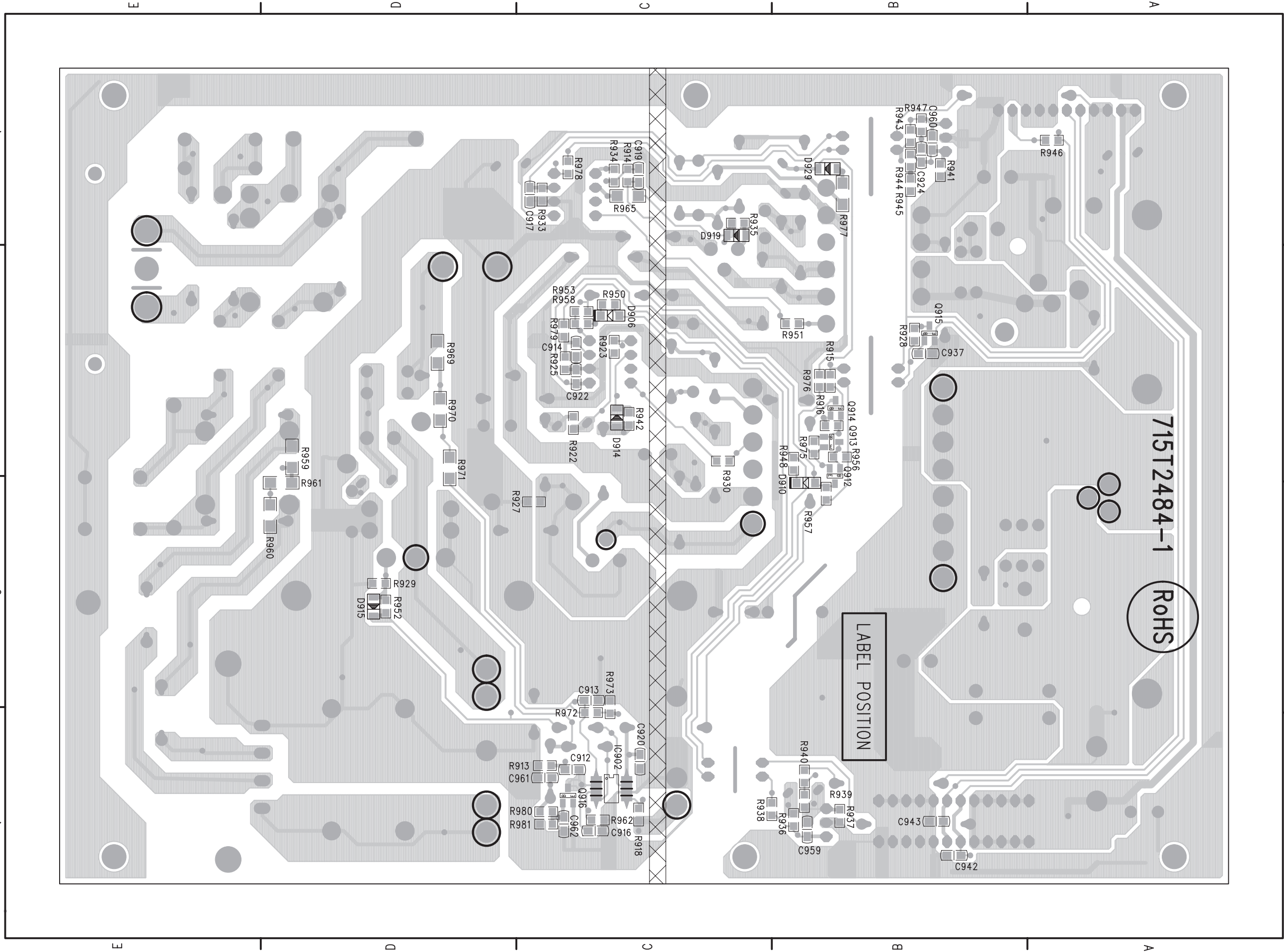
7. Circuit Diagrams and PWB Layouts

Power Board Layout(37")-1



- BD901 D1 FB915 B2
- C900 B2 FB917 B2
- C901 E2 FB919 B3
- C902 E2 FB920 B3
- C907 D3 FB921 D2
- C908 D4 FB922 E2
- C909 E3 FB923 E2
- C921 C3 FB924 D3
- C926 D3 FB925 E3
- C934 A4 HBD901 E1
- C935 D1 HD901 D3
- C938 D1 HD922 A3
- C939 B2 HD927 A3
- C940 B4 HQ901 D2
- C944 C3 IC904 C3
- C945 C4 IC907 C4
- C946 B1 IC909 B3
- C947 C3 IC910 C1
- C948 D3 IC911 B4
- C952 B2 IC912 B1
- C953 A2 IC913 B4
- C954 A1 L910 A1
- C955 B4 L911 A4
- C956 B2 L912 E3
- C957 D4 L913 D3
- C958 B4 L914 C1
- CN902 A4 L915 C3
- CN903 A1 L916 C4
- CN904 E3 Q901 C2
- CN905 A1 Q902 D2
- D901 D3 Q908 C3
- D907 C3 R924 D2
- D908 C4 R926 D2
- D911 C3 R932 C1
- D912 D2 R949 C2
- D918 C4 R963 C3
- D920 C1 R964 C1
- D922 A2 R974 C4
- D924 B4 RV902 D4
- D925 C3 T904 B3
- D926 B2 T905 B2
- D927 A3 TH902 E4
- F901 E4 ZD902 C2
- FB903 D3 ZD904 C3
- FB904 D3 ZD906 B4
- FB905 D3 ZD908 C4
- FB914 A2

Power Board Layout(37")-2



C912	C1	R933	C4
C913	C2	R934	C4
C914	C3	R935	C4
C916	C1	R936	B1
C917	C4	R937	B1
C919	C4	R938	B1
C920	C1	R939	B1
C922	C3	R940	B1
C924	B4	R941	B4
C937	B3	R942	C3
C942	B1	R943	B4
C943	B1	R944	B4
C959	B1	R945	B4
C960	B4	R946	A4
C961	C1	R947	B4
C962	C1	R948	B3
D906	C3	R950	C3
D910	B2	R951	B3
D914	C3	R952	D2
D915	D2	R953	C3
D919	C4	R956	B3
D929	B4	R957	D2
IC902	C1	R958	C3
Q912	B3	R959	D3
Q913	B3	R960	D2
Q914	B3	R961	D2
Q915	B3	R962	C1
Q916	C1	R965	C4
R913	C1	R969	D3
R914	C4	R970	D3
R915	B3	R971	D3
R916	B3	R972	C1
R918	C1	R973	C2
R922	C3	R975	B3
R923	C3	R976	B3
R925	C3	R977	B4
R927	C2	R978	C4
R928	B3	R979	C3
R929	D2	R980	C1
R930	C3	R981	C1

Power Board Schematic Diagram(42")

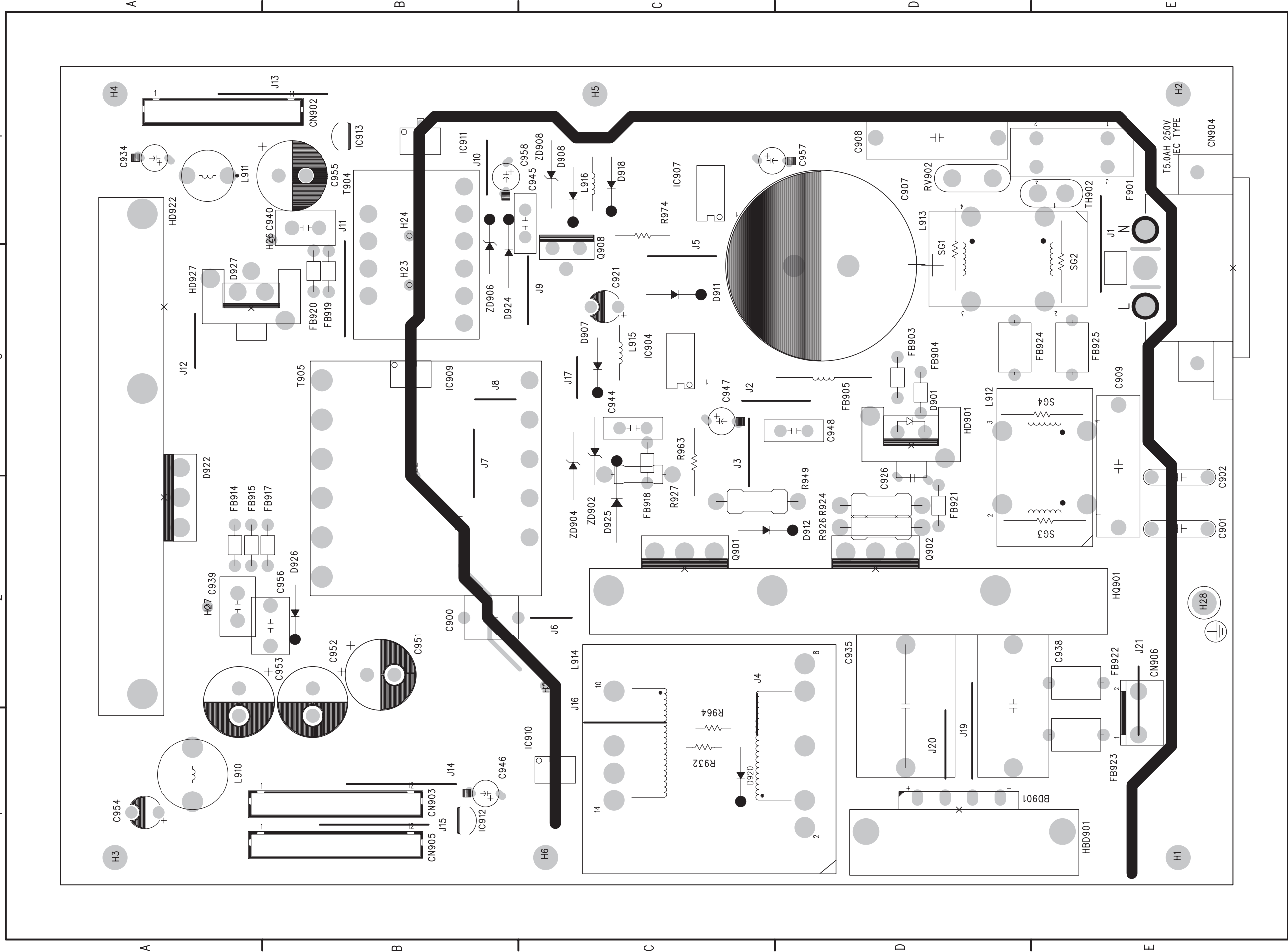
The schematic diagram illustrates a power supply system with the following components and connections:

- Input Section:** A 24V input is connected to a 64841 11P 2.5mm connector. The input is regulated by a 7805 (U1) and a 7812 (U2) ICs.
- Power Transformer:** A 20174 CN904 transformer is used to step down the input voltage.
- Rectification and Filtering:** The transformer output is connected to a full-bridge rectifier (BD901) and a filter capacitor (C901).
- Regulation:** The rectified output is regulated by a 7805 (U1) and a 7812 (U2) ICs.
- Output Section:** The regulated output is connected to a 64842 12P 2.5mm connector.
- Components:** The schematic includes various components such as resistors (R1-R100), capacitors (C1-C100), diodes (D1-D100), and transistors (Q1-Q100).
- Labels:** The diagram is labeled with various component values and part numbers.

Component List (Right Side):

Part	Value	Part	Value
R901	4.7K	C902	100nF
R902	10K	C903	100nF
R903	10K	C904	100nF
R904	10K	C905	100nF
R905	10K	C906	100nF
R906	10K	C907	100nF
R907	10K	C908	100nF
R908	10K	C909	100nF
R909	10K	C910	100nF
R910	10K	C911	100nF
R911	10K	C912	100nF
R912	10K	C913	100nF
R913	10K	C914	100nF
R914	10K	C915	100nF
R915	10K	C916	100nF
R916	10K	C917	100nF
R917	10K	C918	100nF
R918	10K	C919	100nF
R919	10K	C920	100nF
R920	10K	C921	100nF
R921	10K	C922	100nF
R922	10K	C923	100nF
R923	10K	C924	100nF
R924	10K	C925	100nF
R925	10K	C926	100nF
R926	10K	C927	100nF
R927	10K	C928	100nF
R928	10K	C929	100nF
R929	10K	C930	100nF
R930	10K	C931	100nF
R931	10K	C932	100nF
R932	10K	C933	100nF
R933	10K	C934	100nF
R934	10K	C935	100nF
R935	10K	C936	100nF
R936	10K	C937	100nF
R937	10K	C938	100nF
R938	10K	C939	100nF
R939	10K	C940	100nF
R940	10K	C941	100nF
R941	10K	C942	100nF
R942	10K	C943	100nF
R943	10K	C944	100nF
R944	10K	C945	100nF
R945	10K	C946	100nF
R946	10K	C947	100nF
R947	10K	C948	100nF
R948	10K	C949	100nF
R949	10K	C950	100nF
R950	10K	C951	100nF
R951	10K	C952	100nF
R952	10K	C953	100nF
R953	10K	C954	100nF
R954	10K	C955	100nF
R955	10K	C956	100nF
R956	10K	C957	100nF
R957	10K	C958	100nF
R958	10K	C959	100nF
R959	10K	C960	100nF
R960	10K	C961	100nF
R961	10K	C962	100nF
R962	10K	C963	100nF
R963	10K	C964	100nF
R964	10K	C965	100nF
R965	10K	C966	100nF
R966	10K	C967	100nF
R967	10K	C968	100nF
R968	10K	C969	100nF
R969	10K	C970	100nF
R970	10K	C971	100nF
R971	10K	C972	100nF
R972	10K	C973	100nF
R973	10K	C974	100nF
R974	10K	C975	100nF
R975	10K	C976	100nF
R976	10K	C977	100nF
R977	10K	C978	100nF
R978	10K</		

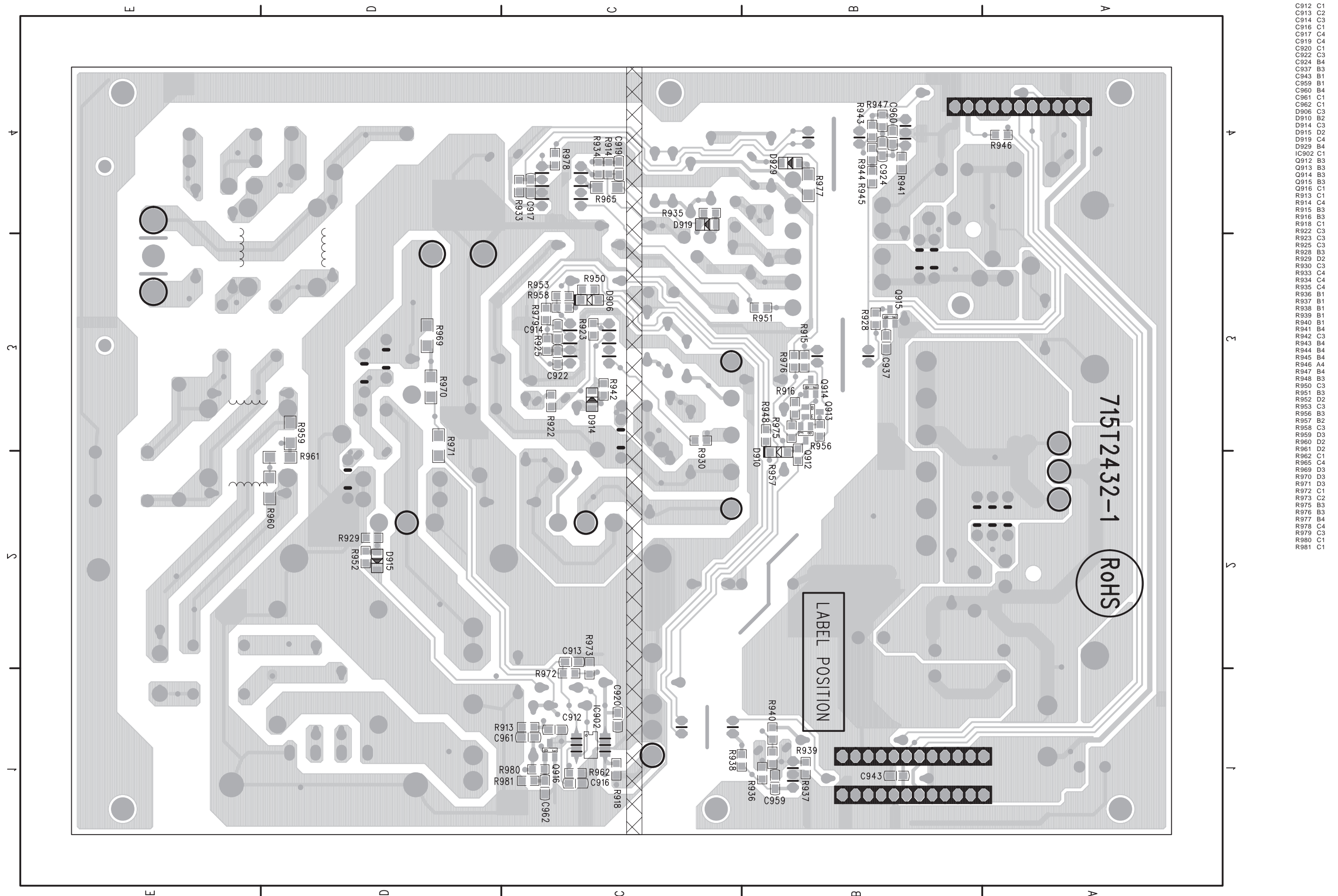
Power Board layout(42")-1



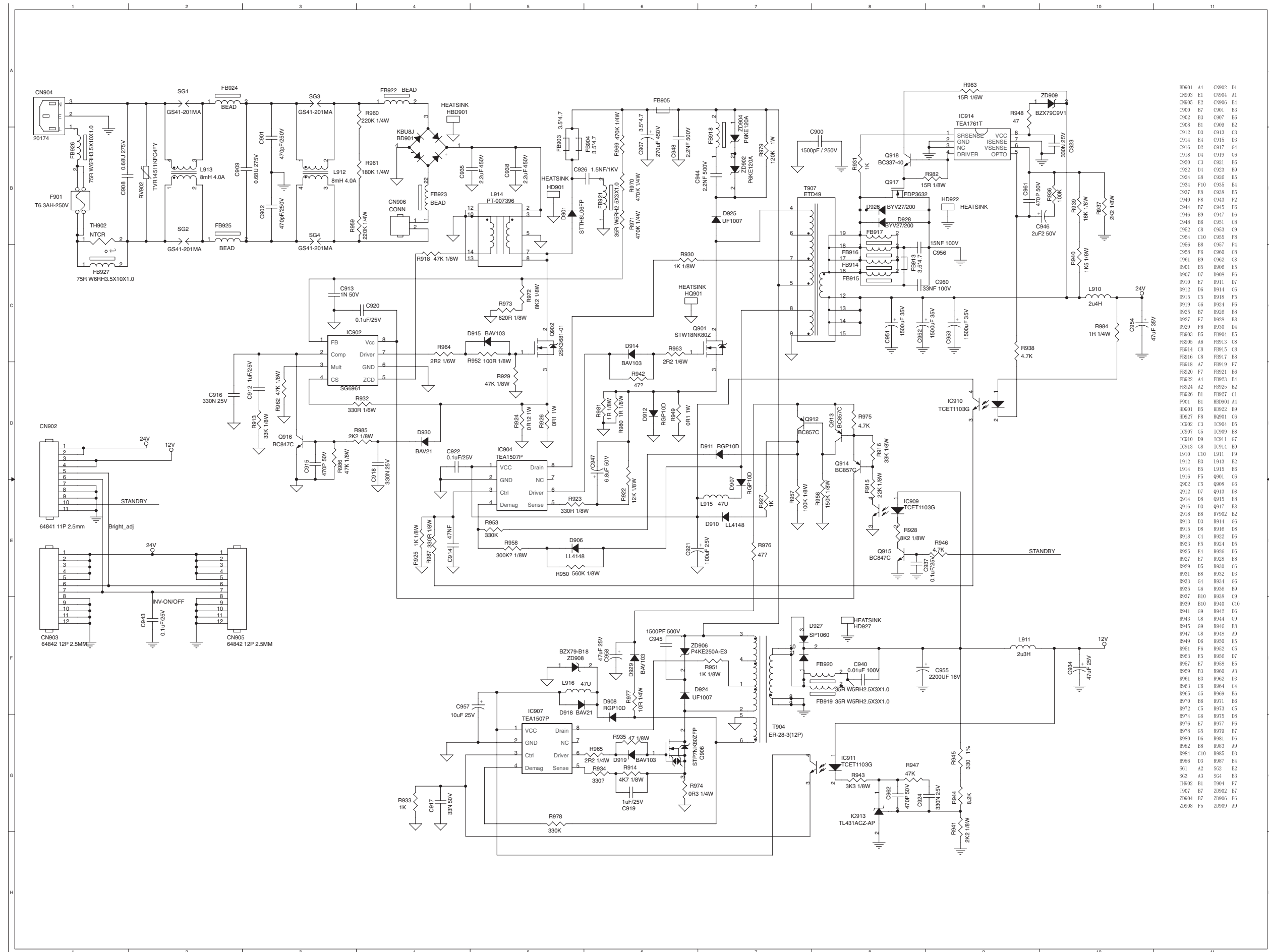
- FB914 A2
- FB915 A2
- FB917 B2
- FB918 C3
- FB919 B3
- FB920 B3
- FB921 D2
- FB922 E2
- FB923 E1
- FB924 D3
- FB925 E3
- HBD901 D1
- HD901 D3
- HD922 A3
- HD927 A3
- HQ901 D2
- IC904 C3
- IC907 C4
- IC908 B3
- IC910 C1
- IC911 B4
- IC912 B1
- IC913 B4
- L910 A1
- L911 A4
- L912 E3
- L913 D3
- L914 C1
- L915 C3
- L916 C4
- Q901 C2
- Q902 D2
- Q908 C3
- Q908 C3
- R924 D2
- R926 D2
- R927 C3
- R932 C1
- R949 C2
- R963 C3
- R964 C1
- R974 C4
- RV902 D4
- T904 B3
- T905 B2
- TH902 E4
- ZD902 C2
- ZD904 C3
- ZD906 B4
- ZD908 C4

7. Circuit Diagrams and PWB Layouts

Power Board Layout(42")-2

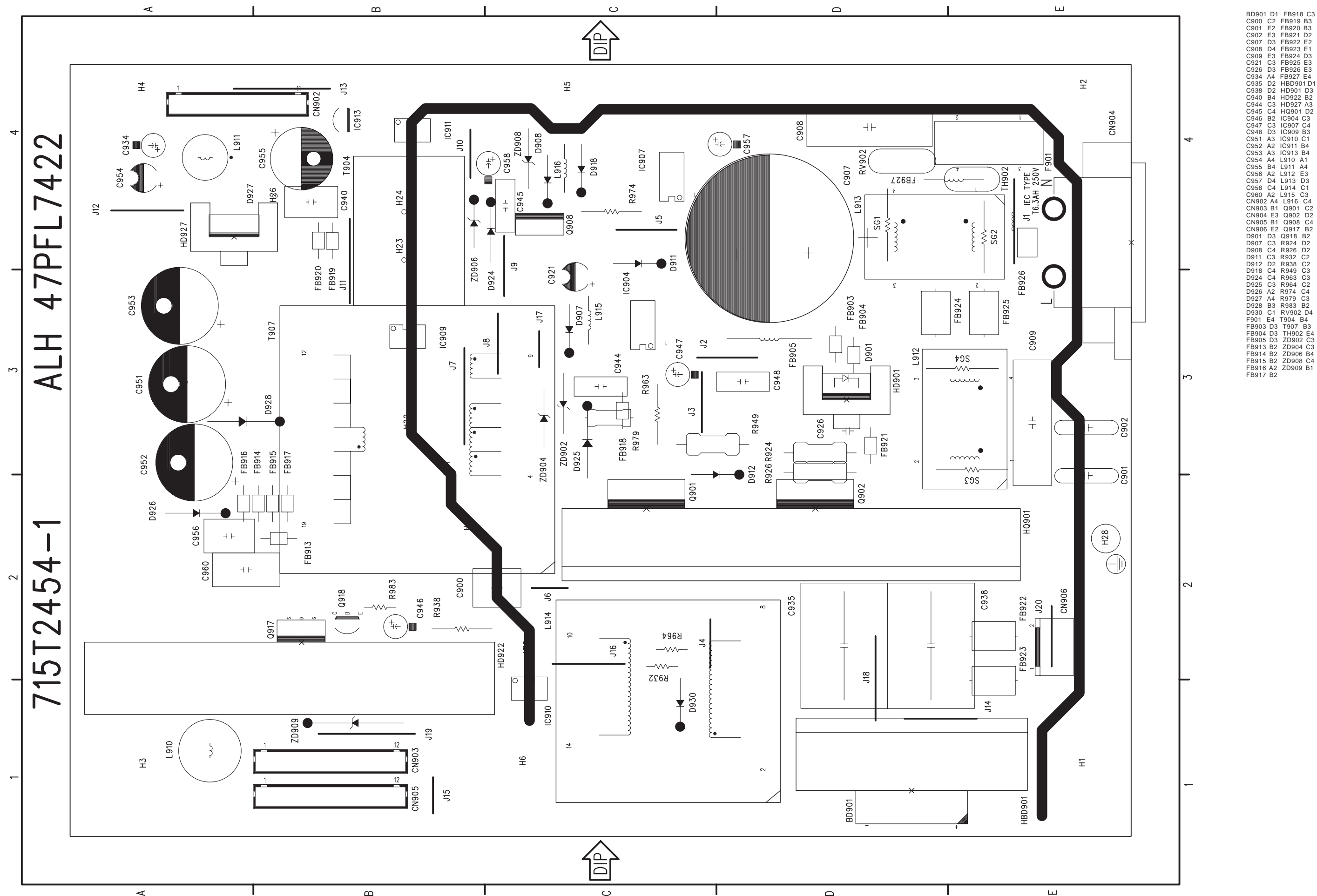


P-3

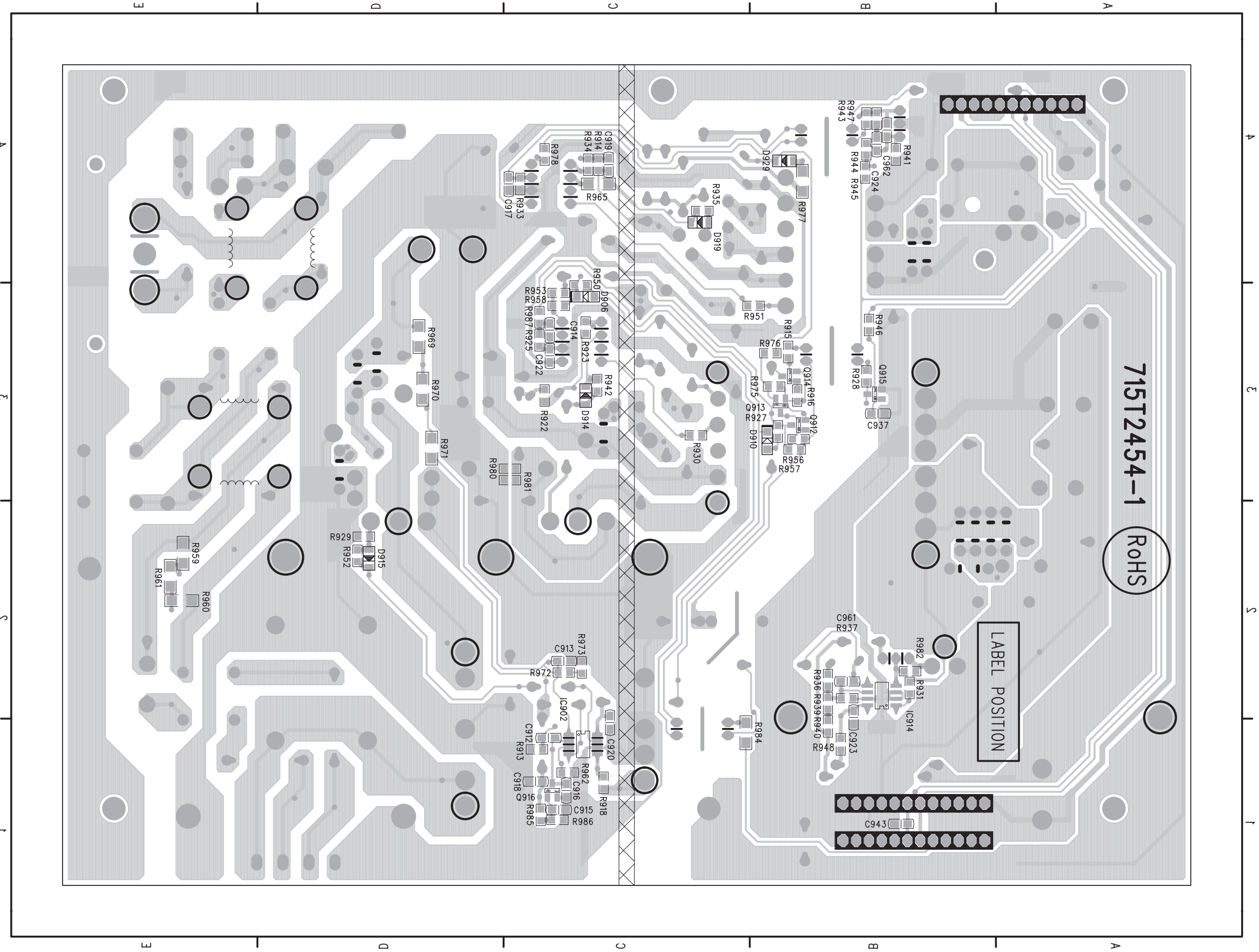


7. Circuit Diagrams and PWB Layouts

Power Board Layout(47")-1



Power Board Layout(47")-2

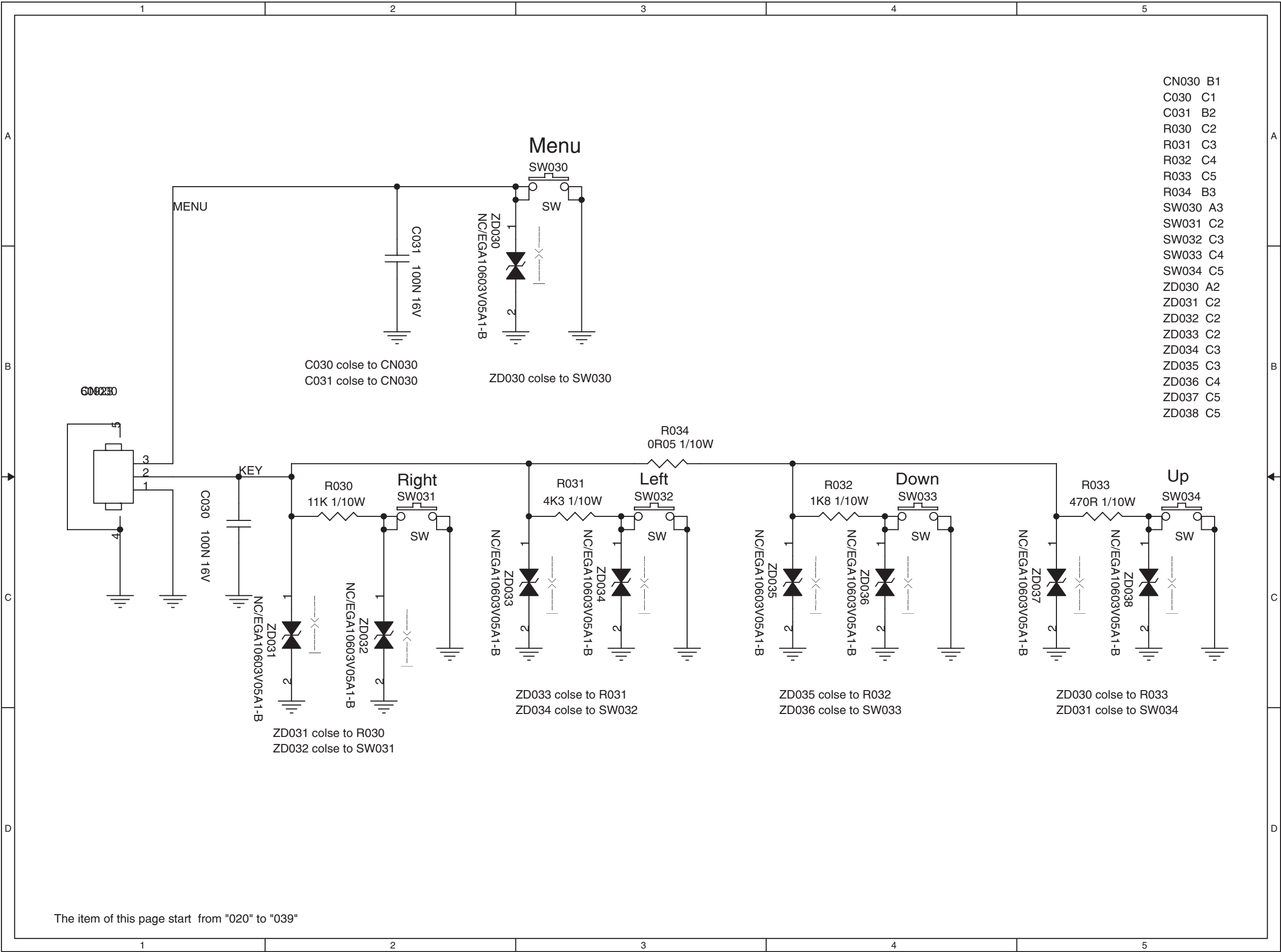


- C912 C1
- C913 C2
- C914 C3
- C915 C1
- C916 C1
- C917 C4
- C918 C1
- C919 C4
- C920 C1
- C922 C3
- C923 B1
- C924 B4
- C937 B3
- C943 B1
- C961 B2
- C962 B4
- D906 C3
- D910 B3
- D914 C3
- D915 D2
- D919 C4
- D929 B4
- IC902 C1
- IC914 B2
- Q912 B3
- Q913 B3
- Q914 B3
- Q915 B3
- Q916 C1
- R913 C1
- R914 C4
- R915 B3
- R916 B3
- R918 C1
- R922 C3
- R923 C3
- R925 C3
- R927 B3
- R928 B3
- R929 D2
- R930 C3
- R931 B2
- R933 C4
- R934 C4
- R935 C4
- R936 B2
- R937 B2
- R939 B2
- R940 B1
- R941 B4
- R942 C3
- R943 B4
- R944 B4
- R945 B4
- R946 B3
- R947 B4
- R948 B1
- R950 C3
- R951 B3
- R952 D2
- R953 C3
- R956 B3
- R957 B3
- R958 C3
- R959 E2
- R960 E2
- R961 E2
- R962 C1
- R965 C4
- R969 D3
- R970 D3
- R971 D3
- R972 C2
- R973 C2
- R975 B3
- R976 B3
- R977 B4
- R978 C4
- R980 C3
- R981 C2
- R982 B2
- R984 C1
- R985 C1
- R986 C1
- R987 C3

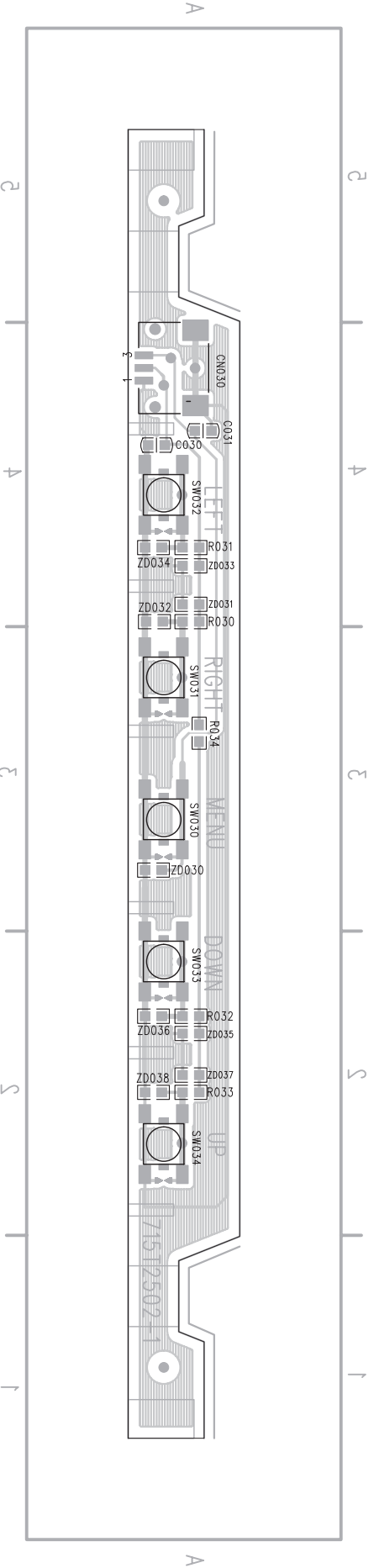
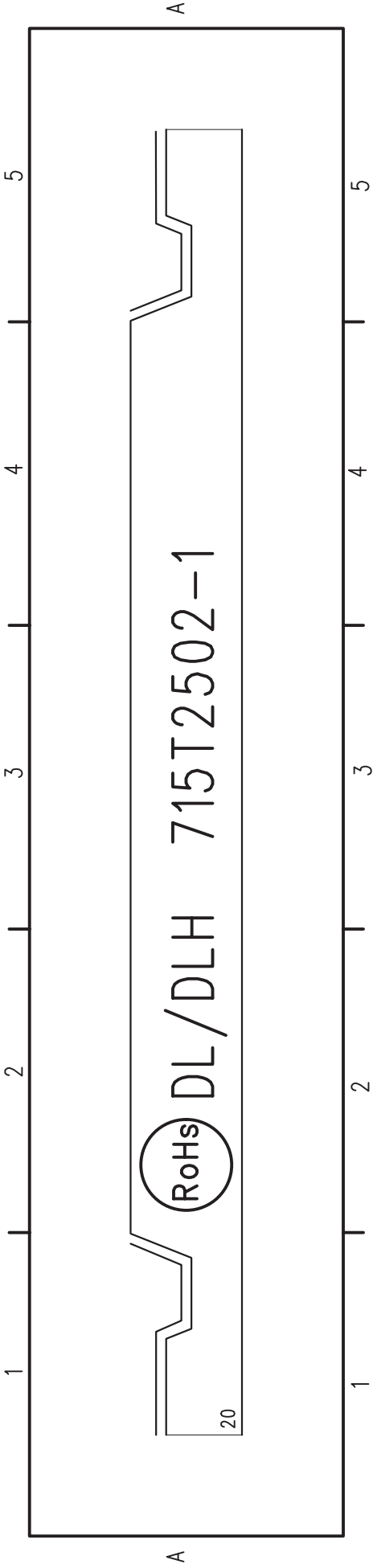
7. Circuit Diagrams and PWB Layouts

Key Board Schematic Diagram

K



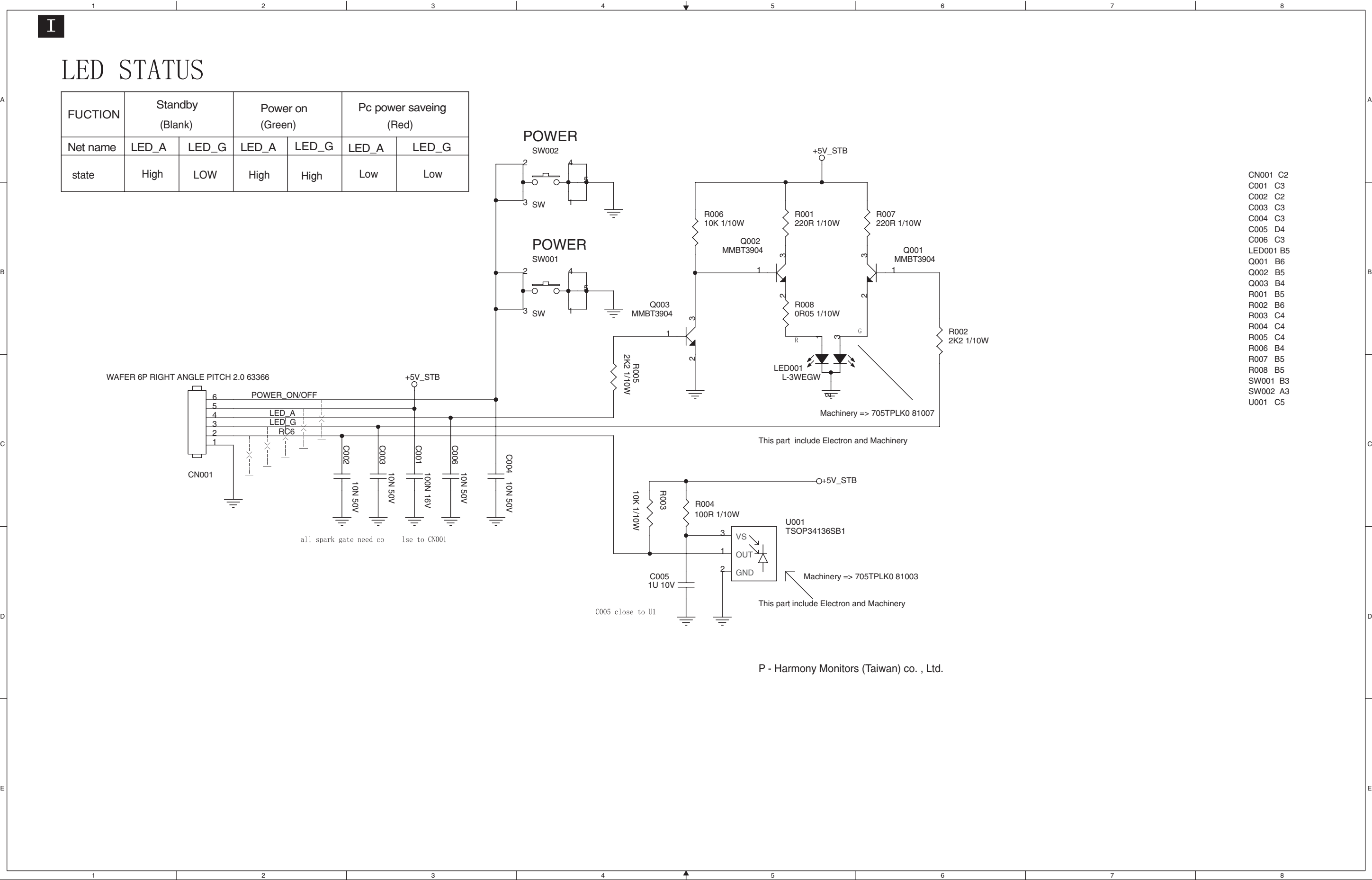
Key Board Layout



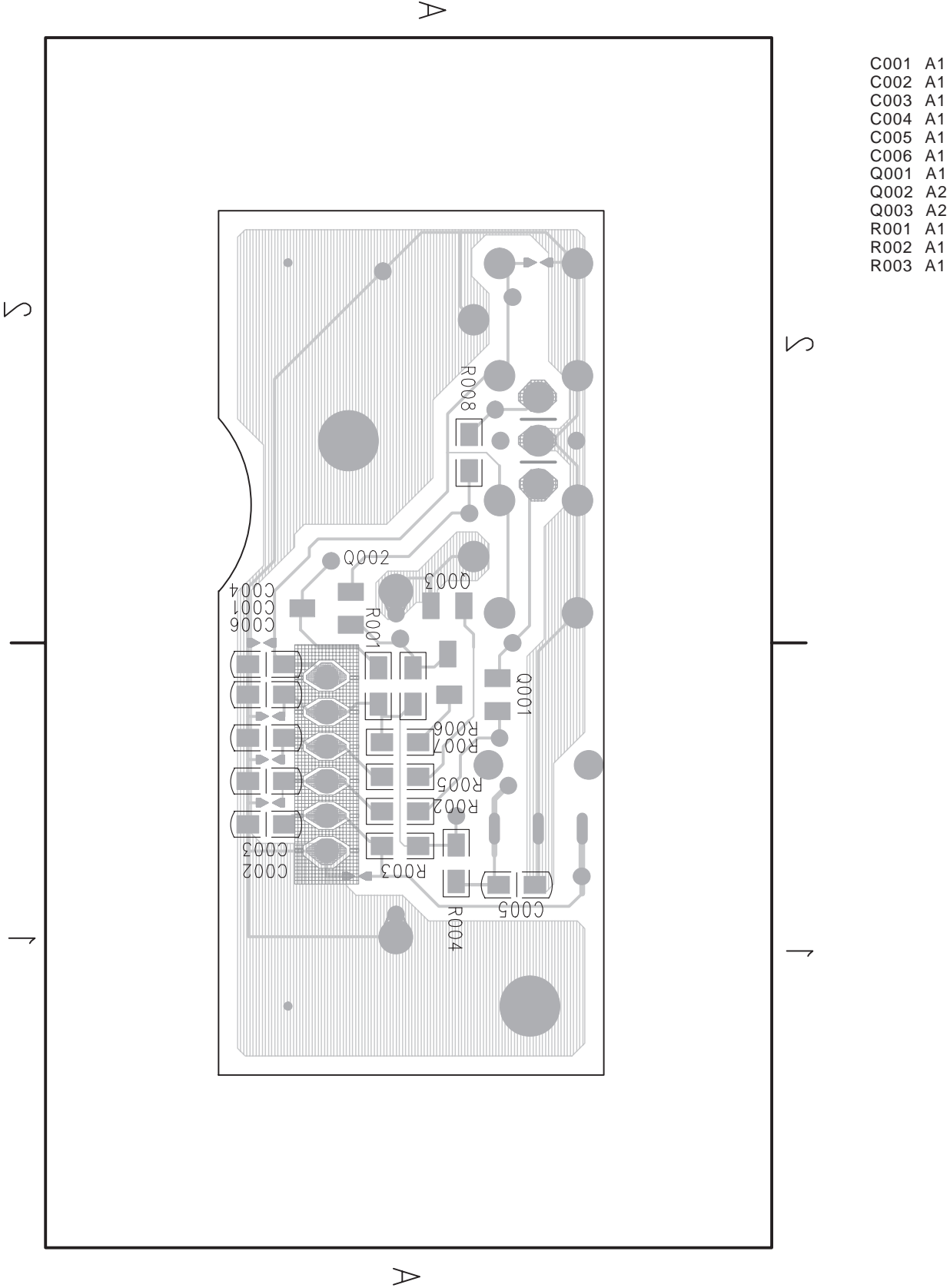
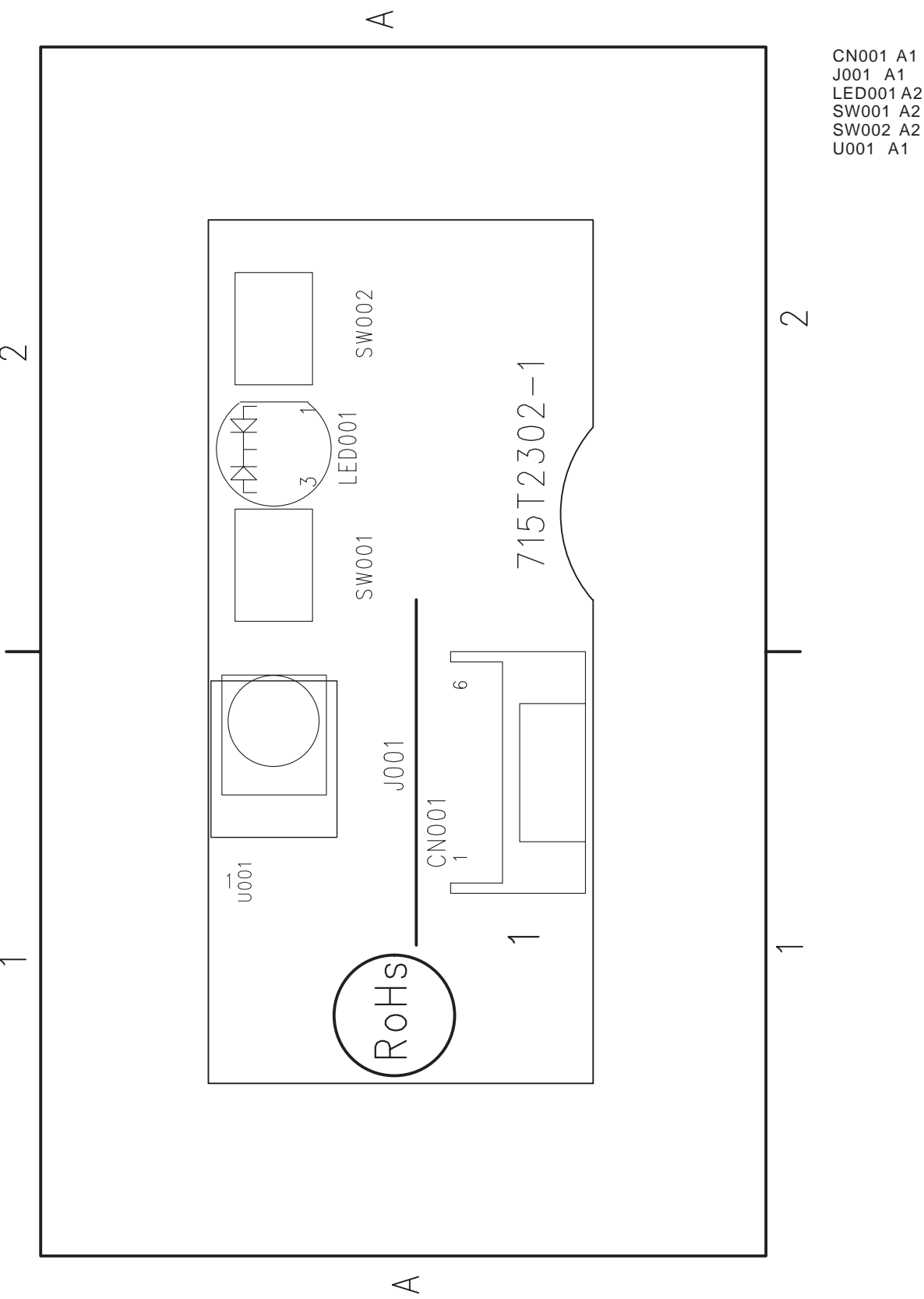
C030 A4 SW14 A3
C031 A4 SW15 A3
C032 A4 SW16 A2
C033 A4 SW17 A2
R030 A4 ZD030 A3
R031 A4 ZD031 A4
R032 A2 ZD032 A4
R033 A2 ZD033 A4
R034 A3 ZD034 A4
SW030 A3 ZD035 A2
SW031 A3 ZD036 A2
SW032 A4 ZD037 A2
SW033 A2 ZD038 A2
SW034 A2 ZD039 A2
SW13 A4

7. Circuit Diagrams and PWB Layouts

IR Board Schematic Diagram

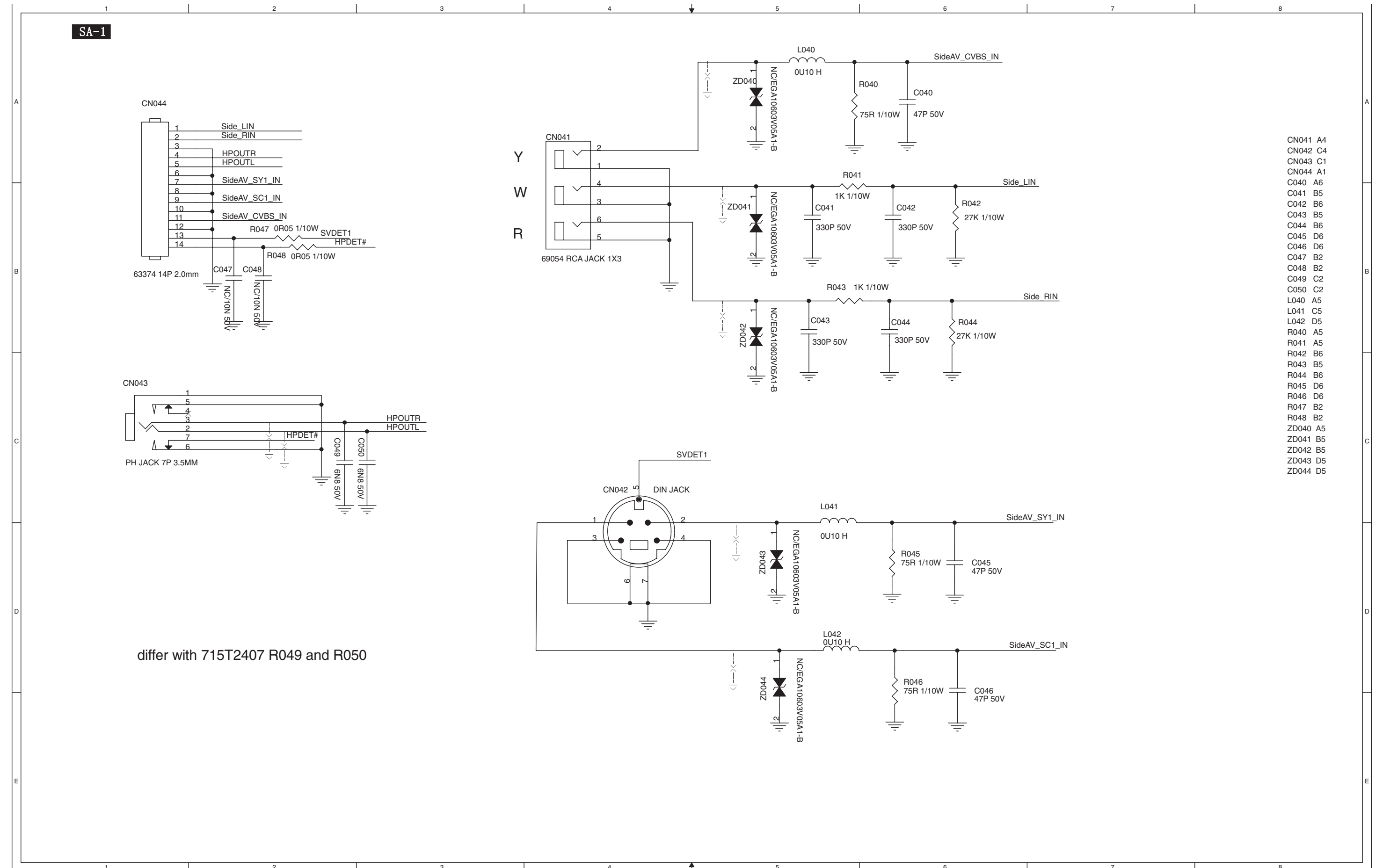


IR Board Layout

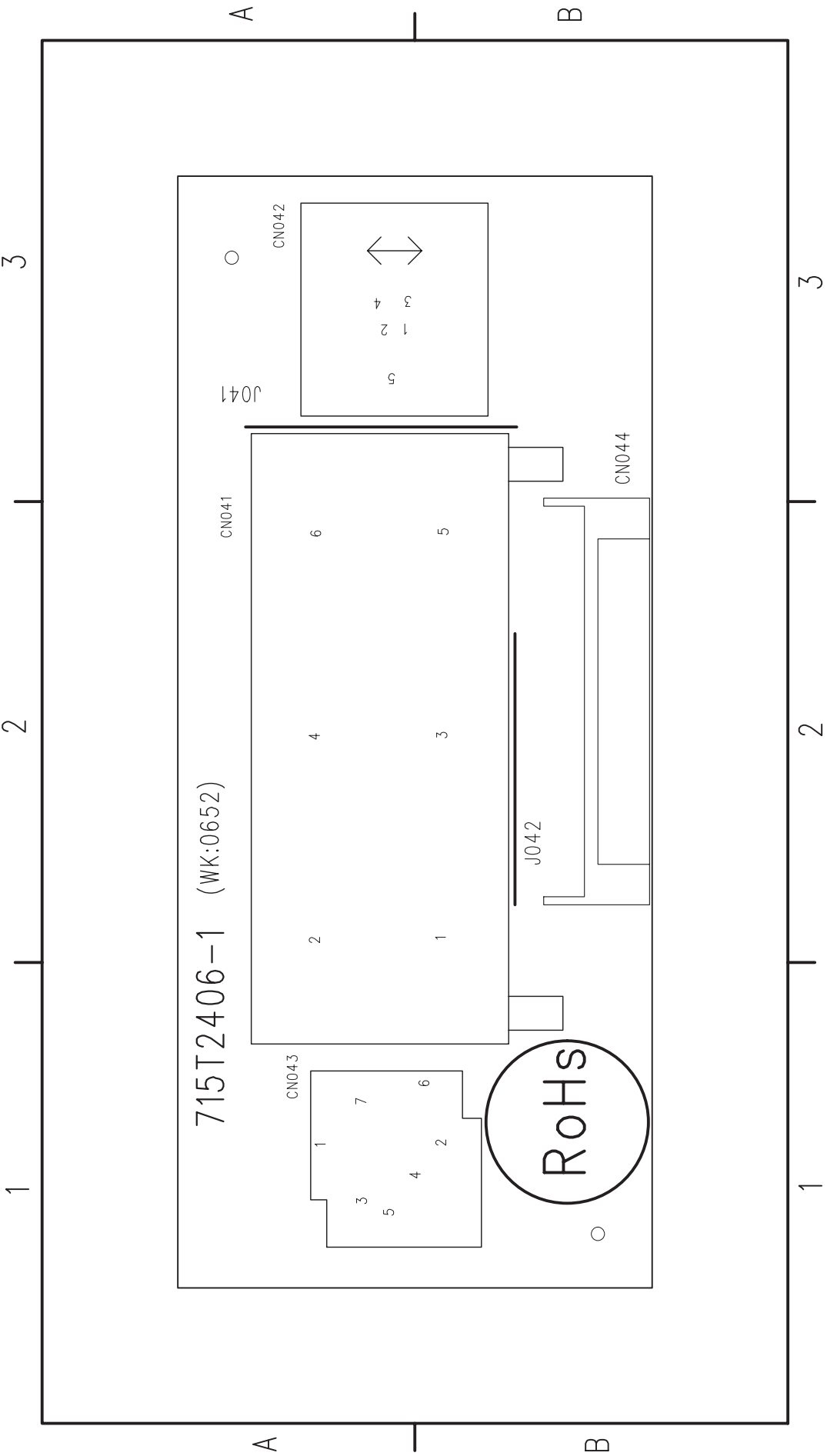


7. Circuit Diagrams and PWB Layouts

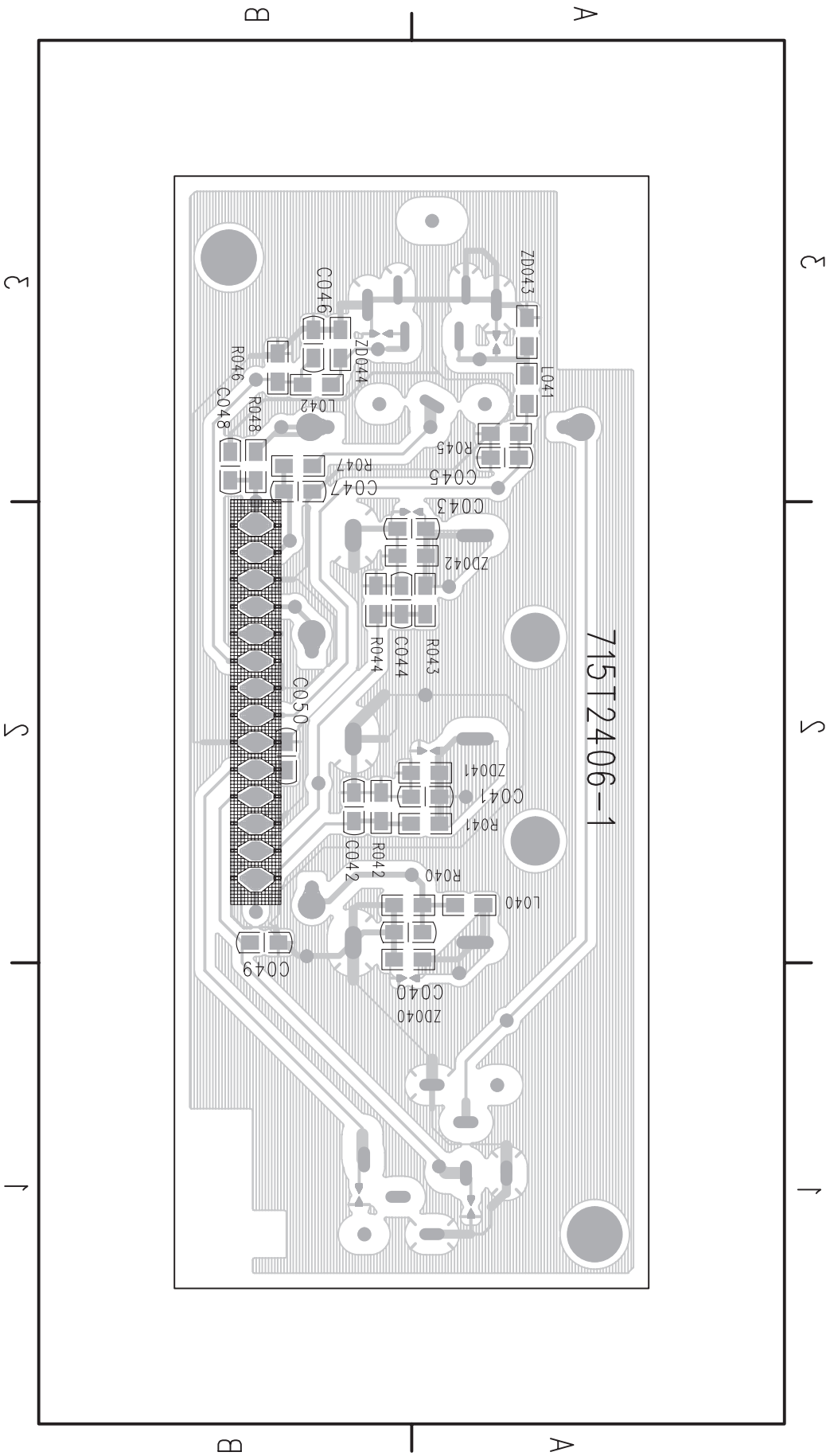
Side AV Board Schematic Diagram(37")



Side AV Board Layout(37")



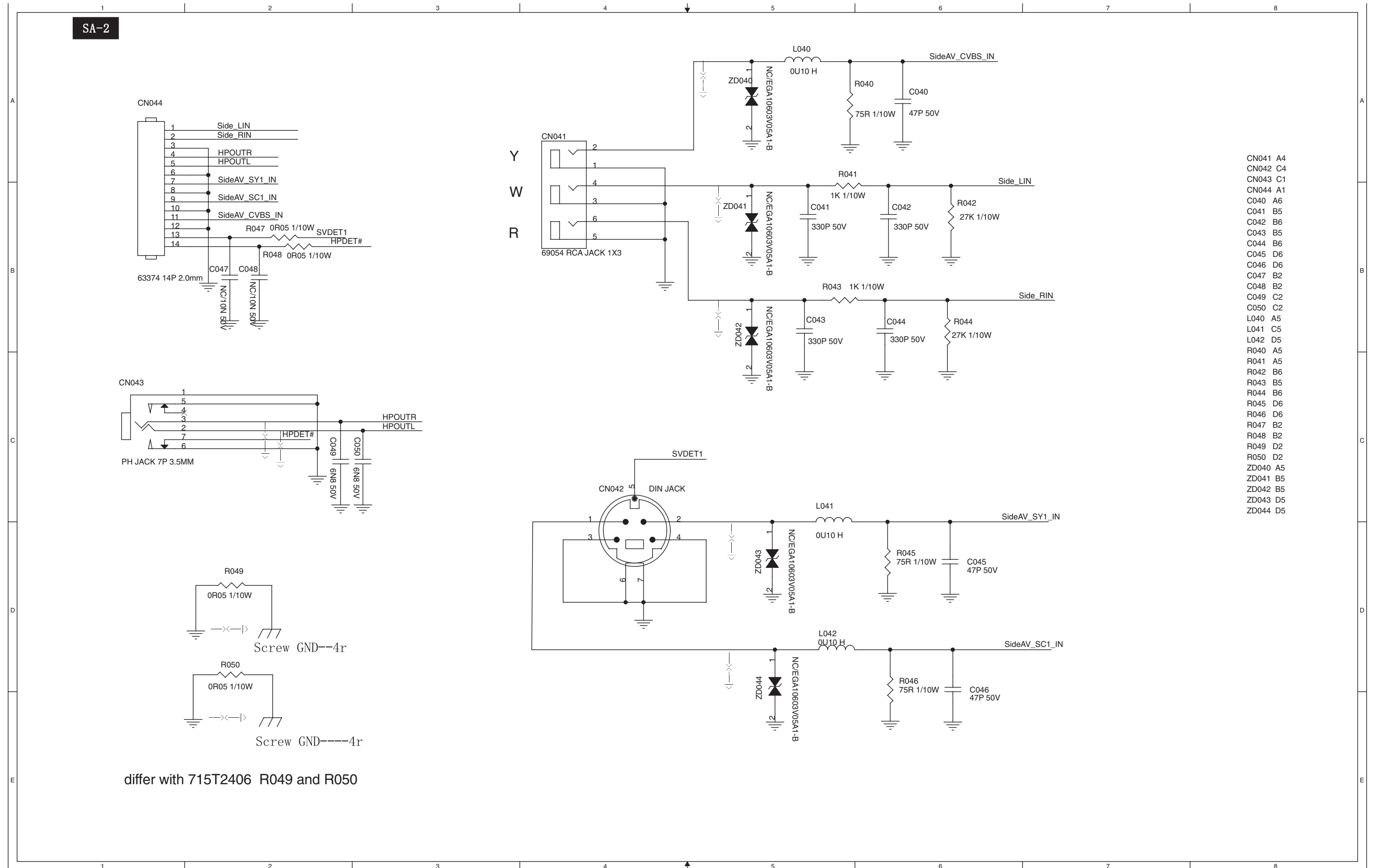
- CN041 A2
- CN042 A3
- CN043 A1
- CN044 B2
- J041 B3
- J042 B2



- C040 B2
- C041 A2
- C042 B2
- C043 A2
- C044 B2
- C045 A3
- C046 B3
- C047 B3
- C048 B3
- C049 B2
- C050 B2
- R047 B3
- R048 B3
- ZD040 B2
- ZD041 A2
- ZD042 A2
- ZD043 A3
- ZD044 B3

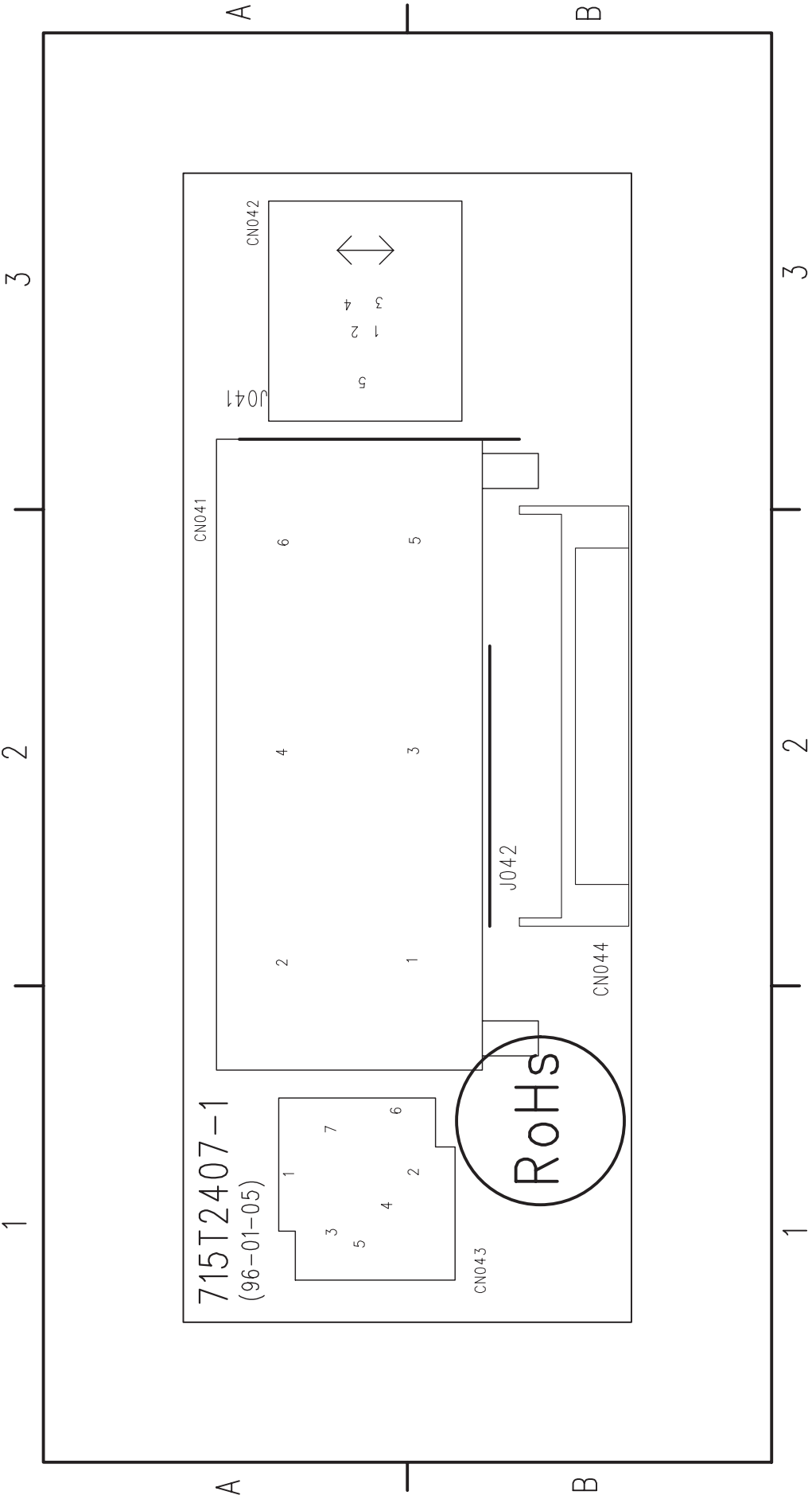
7. Circuit Diagrams and PWB Layouts

Side AV Board Schematic Diagram(42",47")

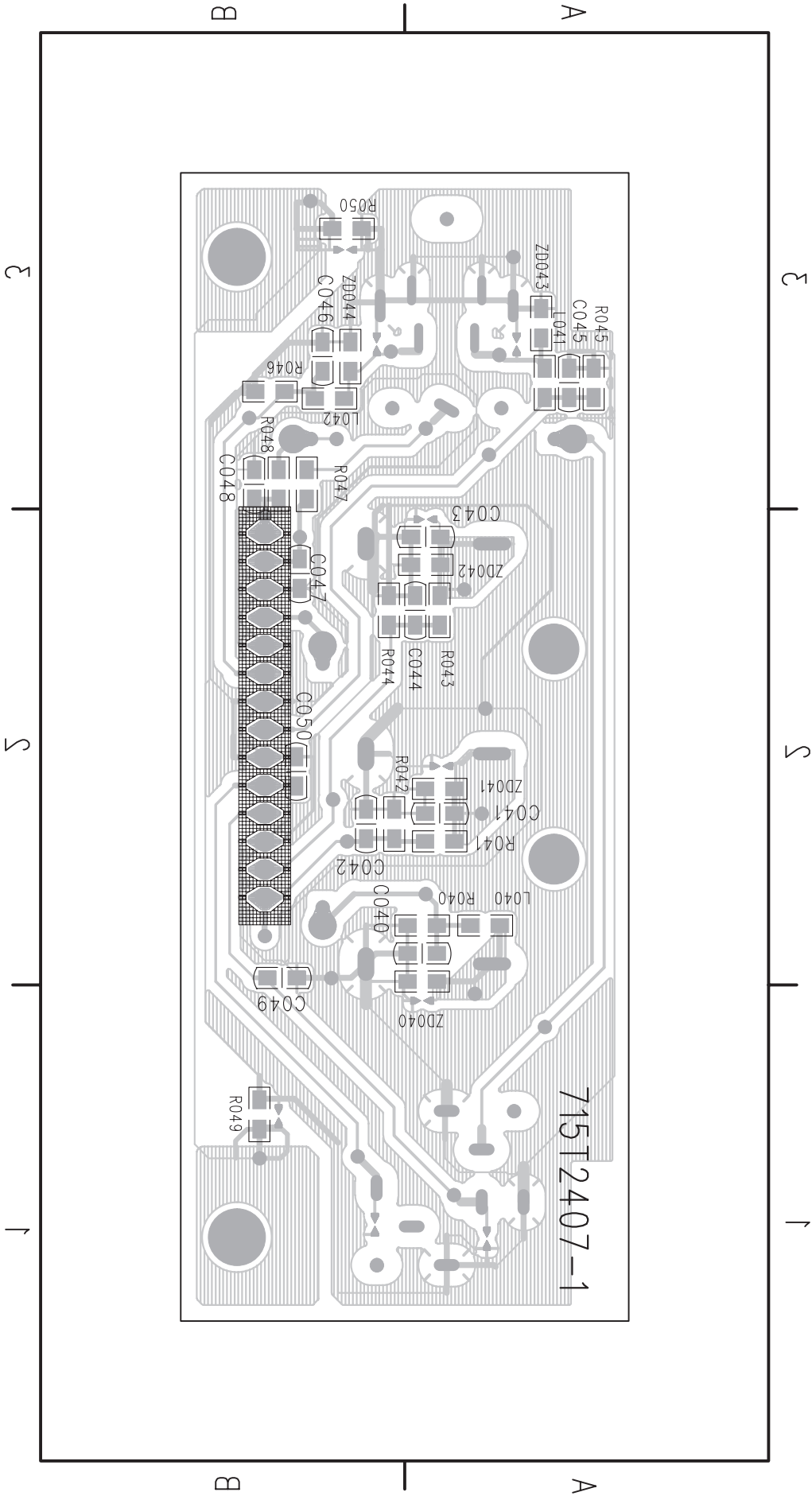


7.Circuit Diagrams and PWB Layouts

Side AV Board Layout(42",47")



CN041 A2
CN042 A3
CN043 A1
CN044 B2
J041 B3
J042 B2



C040 A2 R041 A2
C041 A2 R042 B2
C042 B2 R043 A2
C043 A2 R044 B2
C044 A2 R045 A3
C045 A3 R046 B3
C046 B3 R047 B3
C047 B2 R048 B3
C048 B3 R049 B1
C049 B2 R050 B3
C050 B2 ZD040 A2
L040 A2 ZD041 A2
L041 A3 ZD042 A2
L042 B3 ZD043 A3
R040 A2 ZD044 B3

8. Alignments

Index of this chapter:

8.1 Electrical Instructions

8.2 ISP Instructions

8.3 Serial Number Definition

8.4 WriteMTK_CSM_No_HDCP and WriteMTKHDCPKey Instructions

Notes: You could adjust the LCD/TV following this chapter when the LCD/TV has the below defect.

1. Change panel. 2. Change or repair main board. 3. LCD/TV color is not right. 4. The settings are disabled.

8.1 Electrical Instructions

8.1.1 Analog TV Mode display adjustment

8.1.1.1 White balance adjustment (B)

General set-up :

Equipment Requirements: Minolta CA-110 or Equivalent Color analyzer
Fluke 54200 or equivalent TV RF signal generator

Input requirements:

Input Signal Type : RF signal

1. Set to NTSC system, frequency=187.25MHz (for NAFTAmode), with White pattern of 100%

2. Select Smart picture to Personal mode and check the x, y data.

..put Signal Strength : 10mV (80 dBuV) terminal voltage.

..Input Injection Point : TV Tuner input

..Alignment method:

Initial Set-up:

1. Select source as "TV".
2. Set Smart picture as "Personal" and to be Contrast =50 (LPL), Brightness=50 (LPL) , at normal menu mode.
3. Apply "95IRE White" pattern by TV pattern generator.
4. Enter factory mode menu: press MENU + Numeric keys "062596" + MENU key (FAC mode menu). Then select "Factory" item.

Alignment:

1. Set color temperature to "NORMAL".
2. At FAC mode menu, adjust the CLR TEMP R, CLR TEMP G, CLR TEMP B values to meet "NORMAL" color coordinates specification below. Then store those values to NVM.
3. Set color temperature to "WARM".
4. At FAC mode menu, adjust the CLR TEMP R, CLR TEMP G, CLR TEMP B values to meet "WARM" color coordinates specification below. Then store those values to NVM.
5. Set color temperature to "COOL".
6. At FAC mode menu, adjust the CLR TEMP R, CLR TEMP G, CLR TEMP B values to meet "COOL" color coordinates specification below. Then store those values to NVM.

Color temperature Normal/Warm/Cool (x, y) co-ordinates specification:

Picture Mode	x	y
Normal (8500°K)	0.291±0.005	0.302±0.005
WARM (6500°K)	0.314±0.005	0.324±0.005
COOL (11500°K)	0.273±0.005	0.280±0.005

Table 5: Reading with Minolta CA-110.

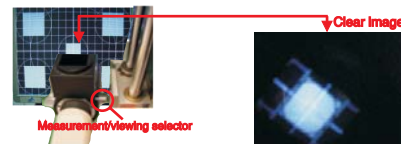
If you have not CA-110, the following R,G and B values are for your reference.

	Normal/(8500°K)	Cool/(11500°K)	Warm/(6500°K)
R	117	144	118
G	112	130	116
B	108	123	144

7. Check the gray pattern should be distinguished and color bar is correct

Note:

1. Use Minolta CA-110 for color coordinates and luminance check.
2. Luminance > 400 cd/m² in the center of the screen when CLR TEMP R, CLR TEMP G, CLR TEMP B set to 128 and Brightness control at 100; Contrast control at 100
3. Reset AV setting, smart picture shall be recalled to be "Rich" and Contrast=60 (LPL), Brightness=55(LPL).



8.1.2 PC mode display adjustment

8.1.2.1 Display quality adjustment

Use timing mode as describe in 2.2, and use the POPO (pixel on pixel off) pattern

to adjust the clock until no stripe and adjust the phase until clear picture. ("Auto" will be done everytime switching to PC mode and mode change)Check all preset 8 modes.

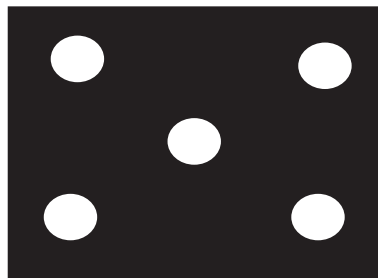
8.1.2.2 WHITE-D adjustment (B)

General set-up :

Equipment Requirements: Minolta CA-110 or Equivalent Color analyzer
Chroma 2250 or equivalent PC signal generator

Input requirements:

Input Signal Type : PC VGA signal
1.1024X768/60Hz PC mode with 5 white block pattern. (see pattern-1)
2.Select Smart picture to Normal mode and check the x, y data.
Input Signal Strength : 0.7 Vp-p linear voltage.
Input Injection Point : PC D-SUB input



Pattern-1

Alignment method:

Initial Set-up:

1. Select source as "PC".
2. Set Contrast = 50 (LPL) and Brightness=50 (LPL) , at normal menu mode.
3. Apply "5 white block" pattern by VGA pattern generator.
4. Enter factory mode menu: press MENU + Numeric keys "062596" + MENU key (FAC mode menu). Then select "Factory" item.

Alignment:

1. At FAC mode menu, select AUTO_COLOR item. Then press "OK" key to adjust ADC_GAIN_R, ADC_GAIN_G, ADC_GAIN_B and ADC_OFFSET_R, ADC_OFFSET_G, ADC_OFFSET_B. Then store those values to NVM.
2. Set color temperature to "NORMAL".
3. At FAC mode menu, adjust the CLR TEMP R, CLR TEMP G, CLR TEMP B values to meet "NORMAL" color coordinates specification below. Then store those values to NVM.
4. Set color temperature to "WARM".
5. At FAC mode menu, adjust the CLR TEMP R, CLR TEMP G, CLR TEMP B values to meet "WARM" color coordinates specification below. Then store those values to NVM.
6. Set color temperature to "COOL".
7. At FAC mode menu, adjust the CLR TEMP R, CLR TEMP G, CLR TEMP B values to meet "COOL" color coordinates specification below. Then store those values to NVM.

Color temperature Normal/Warm/Cool (x, y) co-ordinates specification:

	X	Picture Mode	y
Normal (8500°K)	0.291±0.005		0.302±0.005
WARM (6500°K)	0.314±0.005		0.324±0.005
COOL (11500°K)	0.273±0.005		0.280±0.005

Readings with Minolta CA-110.

Check grayscale

Apply 32 gray pattern.

Check the color poor & noise condition of 32 gray pattern.

8.1.3 YPbPr mode display adjustment

8.1.3.1 White Balance adjustment (B)

General set-up :

8. Alignments

Equipment Requirement: Minolta CA-110 or Equivalent Color analyzer
Quantum Data Pattern Generator 802G, 802BT or equivalent instrument

Input requirements:

Input Signal Type : YPbPr signal
1. 720P mode, TVBar100 pattern by 802G or 802BT.
2. Select Smart picture to Personal mode and check the x, y data.
Input Signal Strength : 1 Vpp for Y signal ; 350 mVpp for Pb & Pr signal
Input Injection Point : AV1 YPbPr (RAC jack)

720P, TVBar100 pattern.



Alignment method:

Initial Set-up:

1. Select source as "AV1".
2. Set Smart picture as "Personal" and to be Contrast =50 (LPL), Brightness=50 (LPL) , at normal menu mode.
3. Apply "TVBar100" pattern or "color bar with black & white" pattern by signal generator.
4. Enter factory mode menu: press MENU + Numeric keys "062596" + MENU key (FAC mode menu). Then select "Factory" item.

Alignment:

1. At FAC mode menu, select AUTO_COLOR item. Then press "OK" key to adjust ADC_GAIN_R, ADC_GAIN_G, ADC_GAIN_B and ADC_OFFSET_R, ADC_OFFSET_G, ADC_OFFSET_B. Then store those values to NVM.
2. Apply full white pattern.
3. Set color temperature to "NORMAL"
4. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "NORMAL" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "NORMAL" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.
5. Set color temperature to "WARM".
6. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "WARM" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "WARM" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.
7. Set color temperature to "COOL".
8. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "COOL" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "COOL" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.

Color temperature Normal/Warm/Cool (x, y) co-ordinates specification:

Picture Mode	x	y
Normal (8500°K)	0.291±0.010	0.302±0.010
WARM (6500°K)	0.314±0.010	0.324±0.010
COOL (11500°K)	0.273±0.010	0.280±0.010

8.1.3.2 Check grayscale

Check the gray pattern should be distinguished and color bar is correct

8.1.4 HDMI mode display adjustment

8.1.4.1 White Balance adjustment (B)

General set-up :

Equipment Requirement: Minolta CA-110 or Equivalent Color analyzer
Quantum Data Pattern Generator 802BT or 881

Input requirements:

Input Signal Type : HDMI signal
1. 1080i mode, full white pattern.
2. Select Smart picture to Personal mode and check the x, y data

Input Signal Strength : 4 channels TMDS signal

Input Injection Point : HDMI1 input

Alignment method:

Initial Set-up:

1. Select source as "HDMI1" or "HDMI2".
2. Set Smart picture as "Personal" and to be Contrast =50 (LPL), Brightness=50 (LPL) , at normal menu mode.
3. Apply full white pattern by Quantum Data signal generator.
4. Enter factory mode menu: press MENU + Numeric keys "062596" + MENU key (FAC mode menu). Then select "Factory" item.

Alignment:

1. Set color temperature to "NORMAL".
2. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "NORMAL" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "NORMAL" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.
3. Set color temperature to "WARM".
4. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "WARM" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "WARM" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.
5. Set color temperature to "COOL".
6. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "COOL" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "COOL" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.

Color temperature Normal/Warm/Cool (x, y) co-ordinates specification:

Picture Mode	x	y
Normal (8500°K)	0.291±0.010	0.302±0.010
WARM (6500°K)	0.314±0.010	0.324±0.010
COOL (11500°K)	0.273±0.010	0.280±0.010

8.1.5 DTV (ATSC) mode display adjustment

8.1.5.1 White Balance adjustment (B)

General set-up :

Equipment Requirement: Minolta CA-110 or Equivalent Color analyzer.

ATSC signal generator - Sencore ATSC997 or equivalent generator

Input requirements:

Input Signal Type : RF signal

1. Set center frequency=69MHz, playing transport stream with white pattern.
2. Select Smart picture to Personal mode and check the x, y data.

Input Signal Strength : 60 dBuV

Input Injection Point : RF input

Alignment method:

Initial Set-up:

1. Select source as "TV" ,and then select digital channel.
2. Set Smart picture as "Personal" and to be Contrast =50 (LPL), Brightness=50 (LPL) , at normal menu mode.
3. Apply white pattern by ATSC997 signal generator.
4. Enter factory mode menu: press MENU + Numeric keys "062596" + MENU key (FAC mode menu). Then select "Factory" item.

Alignment:

1. Set color temperature to "NORMAL".
2. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "NORMAL" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "NORMAL" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.
3. Set color temperature to "WARM".
4. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "WARM" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "WARM" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.
5. Set color temperature to "COOL".

8. Alignments

6. Copy CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values from "COOL" color temperature in Analog TV mode. Check whether (x,y) color coordinates meet "COOL" color specification below. If color coordinates are out of specification, fine-tune CLR_TEMP_R, CLR_TEMP_G and CLR_TEMP_B values. Then store those values to NVM.

Color temperature Normal/Warm/Cool (x, y) co-ordinates specification:

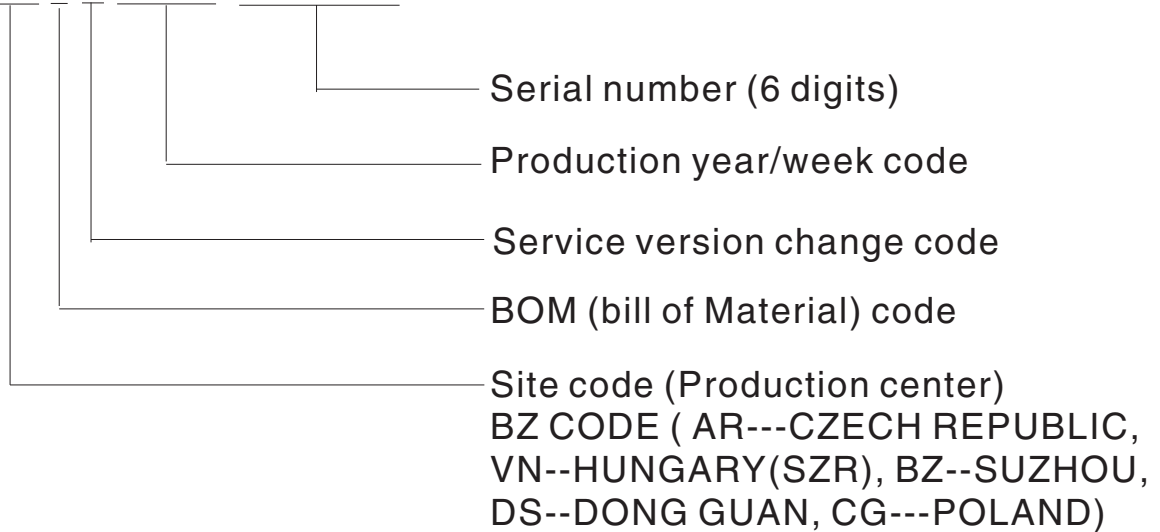
Picture Mode	x	y
Normal (8500°K)	0.291±0.010	0.302±0.010
WARM (6500°K)	0.314±0.010	0.324±0.010
COOL(11500°K)	0.273±0.010	0.280±0.010

8.3 Serial Number Definition

BOM Code

Panel Supplier	Code
AU	1
CPT	2
LPL(LG)	3
QDI	4
CMO	5
HSD	6
SVA	7

B Z 2 A 0 6 5 1 0 0 0 0 0 1



9. Circuit Descriptions, Abbreviations List and IC Data Sheets

Index of this chapter

9.1 Circuit Descriptions

9.2 Abbreviations List

9.3 IC Data Sheets

9.1 Circuit Descriptions

9.1.1 MT5373 FunctionDescription and features

GENERAL DESCRIPTION

MediaTek MT537x is a highly integrated SOC which include DTV backend decoder and TV controller. MT537x support transport de-multiplexer, MPEG-2 video decoder, AC3 audio decoder, LVDS transmitter, TV decoder. The MT537x enables consumer electronics manufactures to build high quality, feature-rich DTV.

World-Leading Video Technology: MT537x embeded the MDDi deinterlacer to generate very smooth picture quality for motion. 3D comb filter also recovery high detail for still picture. The special color processing technology provide favorite and natural color for TV.

Rich Feature for high value product: To enrich the features of DTV, MT537x support HDMI receiver, PIP/POP, memory card and DV decoding.

Credible Analog Technology: The MT537x integrated with high speed VGA ADC, high resolution Video/Audio ADC, 90db Audio DAC and 12-bit Video DAC. It will provide very fine quality for TV.

FEATURES

Host CPU

ARM 926

16K I-Cache and 16K D-Cache

8K Data TCM and 8K Instruction TCM

JTAG ICE interface

Watch Dog timers

Build-in CPI analyzer

Transport Demultiplexer

Support 1 independent transport stream input

Support serial / parallel interface for transport stream input.

Support ATSC, DVB, and MPEG2 transport stream inputs.

Programmable sync detection.

Support DES/3-DES/DVB/Multi-2 de-scramblers.

Up to 8 PIDs even/odd keys for descrambling.

Support 32 PID filters and 32 section filters.

Support positive/negative/mask section filtering.

Support TS recording via IEEE1394 interface.

MPEG2/JPEG Decoder

Support one MPEG-2 HD

MPEG Compliant with DV, MP@ML, MP@HL and MPEG-1 video standards

JPEG decode Base-line or progressive JPEG file

2D Graphics

Support multiple color modes

Point, horizontal/vertical line primitive drawing

Rectangle fill and gradient fill functions

Bitblt with transparent, alpha blending, alpha composition and stretch

Font rendering by color expansion

YCbCr to RGB color space transfer

Support off line scaler

OSD Plane

Three linking list OSD with multiple color mode

Two OSD with scaler

Square size, 32x32 or 64x64 pixel, hardware cursor

Video Plane

Support clip

Flesh tone and management

Gamma/anti-Gamma correction

Color Transient Improvement (CTI)

2D Peaking

Saturation/hue adjustment
 Brightness and contrast adjustment
 Black level extender
 White peak level limiter
 Adaptive Luma/Chroma management
 Automatic detect film or video source
 3:2/2:2 pull down source detection
 SD/HD Advanced Motion adaptive de-interlacing with excellent low angle
 Arbitrary ratio vertical/horizontal scaling of video, from 1/32X to 32X
 Advanced linear and non-linear Panorama scaling.
 Programmable Zoom viewer
 Progressive scan output
 Support Alpha blending
 Picture-in-Picture (PIP)
 Picture-Out-Picture (POP)
 Dithering processing for LCD display
 Frame rate conversion, 50Hz to 75Hz
 Support video output mirror and upside down
 Support 480i/ 576i/ 480p /576p/ 720p/ 1080i/ 1080p output format

TV Encoder

4 DAC to support VGA or SVM/R/G/B

LVDS

Dual-channel LVDS transmitter
 Built in spread spectrum for EMI performance
 Support 6/8/10-bit format output
 Programmable panel timing output

CVBS In

On chip 54MHz 10-bit video ADC
 Support PAL (B,G,D,H,M,N,I,Nc), PAL(Nc), PAL, NTSC, NTSC-4.43, SECAM
 Macrovision detection
 NTSC/PAL support 3D Motion Adaptive comb filter and SECAM support 2D comb filter
 Motion Adaptive 3D Noise Reduction built in
 VBI data slicer for CC/TT decoding
 Supporting 4-CVBS, 2-S-Video

VGA In

Support VGA input up to UXGA 150MHz
 Support full VESA standards

Component Video In

Support two component video input
 Support 480i/480p/576i/576p/720p/1080i

Digital Video-In I/F

One 16-bit digital video-in I/F for MT5373
 One 8-bit digital video-in I/F for MT5372/MT5371

Audio line In I/F
 1 bit data (Two channel)

HDMI Receiver

HDMI1.1
 DVI 1.0
 EIA/CEA-861B
 HDCP 1.1

TV audio demodulator

Support BTSC/EIA-J/A2/NICAM/PAL FM/SECAM world wide format
 Standard auto detection
 Stereo demodulation, SAP demodulation
 Noise reduction
 Mode selection (Main/SAP/Stereo)
 Pink noise and white noise generator
 Equalizer
 Sub-woofer/Bass enhancement
 Noise auto mute
 3D surround processing include virtual surround

Audio and video lip synchronization
Support Reverberation

Audio DAC
On chip 4 audio DAC support R/L channel and subwoofer output

DRAM Controller
Supports 64Mb to 1Gb DDR DRAM devices
Configurable 32/64 bit data bus for MT5373
Configurable 16/32 bit data bus for MT5372/MT5371
Support DDR1-333, DDR1-400, DDR2-400, DDR2-533, DDR2-667 JEDEC specification compliant SDRAM

Audio DSP

Support Dolby Digital AC-3 decoding(ATSC)
MPEG-1 layer I/II decoding (DVB)
MPEG-2 AAC decoding (Japan)
DV audio decoding
MP3 decoding
Dolby Prologic II
audio output: 7.1ch + 2ch (down mix)
Pink noise and white noise generator
Equalizer
Bass management
3D surround processing include virtual surround
Audio and video lip synchronization
Support reverberation
Auto volume control
One SPDIF out
5-bit data(10-channel) I2S out I/F up to 24-bit resolution per channel

Peripherals

Two UARTs with Tx and Rx FIFO, one of them have hardware flow control
Three serial interfaces, one is master for general purpose, second is master for HDMI key, third is slave for HDMI EDID data.
Three PWMs
IR blaster and receiver
IEEE 1394 link controller
Support IDE bus or Memory card I/F; IDE support ATA/ATAPI7 UDMA mode 5, 100 MB/s;
Memory card I/F support MS/MS-Pro, SD, CF, MMC, SM, and xD
Real-time clock and watchdog controller
Smart Card Reader
PCMCIA/POD/CI interface
Support three NOR flash or one NOR and one NAND flash
Support CableCARD host control bus

IC Outline

MT5373 668 Pin, MT5372/MT5371 588 Pin BGA Package
3.3V/1.2V and 2.5V for DDR1, 1.8V for DDR2

9.1.2 MT5112 Description

Description

The MT5112BD is a highly integrated single-chip for digital terrestrial HDTV and digital cable TV demodulation. The chip is designed specifically for the digital terrestrial HDTV and CATV receivers, And is fully compliant with ATSC A/53, SCTE DVS-031, and ITU J.83 Annex B standards. Compliant with ATSC digital television standard
Supports SCTE DVS-031 and ITU J.83 Annex B digital CATV standard
Accepts direct IF (44MHz or 43.75MHz) and low IF (5.38MHz)
Differential IF input with programmable input signal level : 0.5Vpp to 2Vpp
NTSC interference rejection capability
Compensate echo up to -35 to +60us range for terrestrial HDTV reception
Pass all Brazil fading channel ensembles
Meet all ATSC A74 requirement
On-chip programmable gain amplifier
25MHz crystal for clock generation
Excellent adjacent and co-channel rejection capability, only single SAW is required
Full-digital timing recovery, no VCXO is required
Full-digital frequency offset recovery with wide acquisition range +/- 1MHz for ATSC and +/- 250kHz for CATV reception
Dual digital AGC controls for IF and RF respectively
MPEG-2 transport stream output in parallel or serial format
On-chip error rate estimators for TS packets, TCM decoder, and equalizer
EIA/CEA-909 antenna interface, both mode A and mode B are supported

Controlled by I2C interface
 Supports sleep mode to save power consumption
 Core power supply: 1.8V , peripheral power supply : 3.3V
 100-TQFP with lead free package

9.1.3 TD8932 description and features

GENERAL DESCRIPTION

The TDA8932 is a high efficiency class-D amplifier with low power dissipation.

The maximum output power is 2x25W in stereo half-bridge application ($R_L=4\ \Omega$) or 1x50W in mono full bridge application ($R_L=8\ \Omega$). Due to the low power dissipation the device can be used without any external heat sink when playing music. If proper cooling via the PCB is implemented, a continuous output power of 2 x 15W is feasible. Due to the implementation of thermal foldback even for high supply voltages and/or lower load impedances the device remains operating with considerable music output power without the need for an external heat sink.

The device has two full differential inputs driving four each an independent output. It can be used as mono full bridge configuration (BTL) or as stereo half bridge configuration (SE).

FEATURES

High efficiency
 Application without heatsink using thermally enhanced small outline package
 Operating voltage from 10V to 36V asymmetrical or +/-5V to +/-18V symmetrical
 Thermally protected
 Thermal foldback
 Current limiting to avoid audio holes
 Full short circuit proof across load and to supply lines (using advanced current protection)
 Switchable internal / external oscillator (master-slave setting)
 No pop noise
 Low power dissipation
 Mono bridged tied load (full bridge) or stereo single ended (half bridge) application
 Full differential inputs

9.1.4 NPC5422A description and features

General Description

The NCP5422A is a dual N-channel synchronous buck regulator controller. It contains all the circuitry required for two independent buck regulators and utilizes the V2[®] control method to achieve the fastest possible transient response and best overall regulation, while using the least number of external components. The NCP5422A features out-of-phase synchronization between the channels, reducing the input filter requirement. The NCP5422A also provides undervoltage lockout, Soft Start, built in adaptive non-overlap time and hiccup mode overcurrent protection.

Features

V2 Control Topology
 Hiccup Mode Overcurrent Protection
 150 ns Transient Response
 Programmable Soft Start
 100% Duty Cycle for Enhanced Transient Response
 150 kHz to 600 kHz Programmable Frequency Operation
 Switching Frequency Set by Single Resistor
 Out-Of-Phase Synchronization Between Channels
 Undervoltage Lockout
 Both Gate Drive Outputs Held Low During Fault Condition

9.2 Abbreviations List

CSM	Customer Service Mode
ATSC	Advanced Television Systems Committee, the digital TV standard in the USA
DVD	Digital Versatile Disc
EEPROM	Electrically Erasable and Programmable Read Only Memory
3DNR	Temporal (3D) Noise Reduction
AGC	Automatic Gain Control: algorithm that controls the video input of the feature box
FM	Field Memory or Frequency Modulation
AM	Amplitude Modulation
AP	Asia Pacific
ASF	Auto Screen Fit: algorithm that adapts aspect ratio to remove horizontal black bars without discarding video information
ATV	See Auto TV
Auto TV	A hardware and software control system that measures picture content, and adapts image parameters in a dynamic way
AV	External Audio Video
AVIP	Audio Video Input Processor
B/G	Monochrome TV system. Sound carrier distance is 5.5 MHz
ComPair	Computer aided rePair
CP	Connected Planet / Copy Protection
CSS	Content Scrambling System; An encryption method for MPEG-2 video on DVDs. The algorithm and keys required to decode the disc are stored on the DVD-player
CVBS	Composite Video Blanking and Synchronization
DFU	Directions For Use: owner's manual
DNR	Digital Noise Reduction: noise reduction feature of the set
DSP	Digital Signal Processing
DST	Dealer Service Tool: special remote control designed for service technicians
DTCP	Digital Transmission Content Protection; A protocol for protecting digital audio/video content that is traversing a high speed serial bus, such as IEEE-1394
DVI(-d)	Digital Visual Interface (d= digital only)
EAS	Emergency Alert Signalling; A cable TV standard (SCTE18) to signal emergency information to digital terminal devices
E-DDC	Enhanced Display Data Channel (VESA standard for communication channel and display). Using E-DDC, the video source can read the EDID information from the display.
EDID	Extended Display Identification Data (VESA standard)
EMI	Electro Magnetic Interference
EMM	Entitlement Management Message
EPLD	Erasable Programmable Logic Device
EU	Europe
FBL	Fast BLanking: DC signal accompanying RGB signals
FDS	Full Dual Screen (same as FDW)
FDW	Full Dual Window (same as FDS)
FLASH	FLASH memory
FTV	Flat TeleVision
H	H_sync to the module
HD	High Definition
HDD	Hard Disk Drive

NTSC	National Television Standard Committee. Color system mainly used in North America and Japan. Color carrier NTSC M/N= 3.579545 MHz, NTSC 4.43= 4.433619 MHz (this is a VCR norm, it is not transmitted off-air)
NVM	Non-Volatile Memory: IC containing TV related data such as alignments
OSD	On Screen Display
PLL	Phase Locked Loop. Used for e.g.
LVDS	Low Voltage Differential Signalling
PAL	Phase Alternating Line. Color system mainly used in West Europe (color carrier= 4.433619 MHz) and South America (color carrier PAL M= 3.575612 MHz and PAL N= 3.582056MHz)
PCB	Printed Circuit Board (same as PWB)
PCM	Pulse Code Modulation
PWB	Printed Wiring Board (same as "PCB")
PWM	Pulse Width Modulation
QAM	Quadrature Amplitude Modulation; modulation method
RAM	Random Access Memory
RGB	Red, Green, and Blue. The primary color signals for TV. By mixing levels of R, G, and B, all colors (Y/C) are reproduced.
RC	Remote Control RC5 / RC6 Signal protocol from the remote control receiver
RESET	RESET signal
ROM	Read Only Memory
SAM	Service Alignment Mode
SCART	Syndicat des Constructeurs d'Appareils Radiorecepteurs et Televisieurs
SCL	Serial Clock I2C
SCL-F	CLock Signal on Fast I2C bus
SD	Standard Definition
SDA	Serial Data I2C
SDA-F	DAta Signal on Fast I2C bus
SDI	Serial Digital Interface, see "ITU-656"
SDRAM	Synchronous DRAM
SECAM	SEquence Couleur Avec Memoire. Color system mainly used in France and East Europe. Color carriers= 4.406250 MHz and 4.250000 MHz
SIF	Sound Intermediate Frequency
SMPS	Switched Mode Power Supply
SOG	Sync On Green
SOPS	Self Oscillating Power Supply
I2C	Integrated IC bus
I2D	Integrated IC Data bus
I2S	Integrated IC Sound bus
IB	In Band channel
IF	Intermediate Frequency
Interlaced	Scan mode where two fields are used to form one frame. Each field contains half the number of the total amount of lines. The fields are written in "pairs", causing line flicker.
IR	Infra Red
IRQ	Interrupt Request
LATAM	Latin America
LCD	Liquid Crystal Display
LED	Light Emitting Diode
LPL	LG.Philips LCD (supplier)
MUTE	MUTE Line

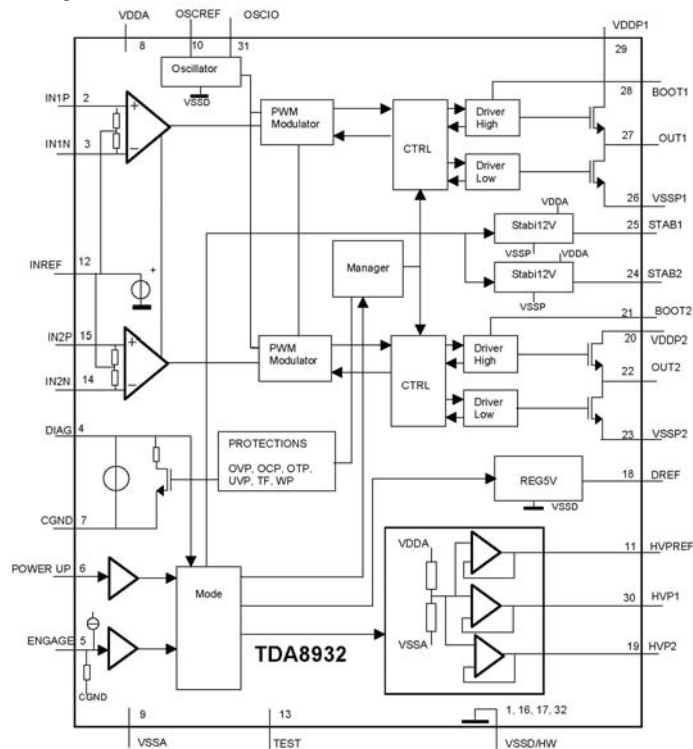
TFT	Thin Film Transistor
SRAM	Static RAM
STBY	STandBY
SOG	Sync On Green
SVGA	800x600 (4:3)
SVHS	Super Video Home System
SW	Software
SWAN	Spatial temporal Weighted Averaging Noise reduction
SXGA	1280x1024
TMD5	Transmission Minimized Differential Signalling
UXGA	1600x1200 (4:3)
V	V-sync to the module
VCR	Video Cassette Recorder
VESA	Video Electronics Standards Association
VGA	640x480 (4:3)
VL	Variable Level out: processed audio output toward external amplifier
VSF	Vestigial Side Band; modulation method
WYSIWYR	What You See Is What You Record: record selection that follows main picture and sound
WXGA	1280x768 (15:9)
XGA	1024x768 (4:3)
Y	Luminance signal
YPbPr	Component video. Luminance and scaled color difference signals (B-Y and R-Y)

9.3 IC Data Sheets

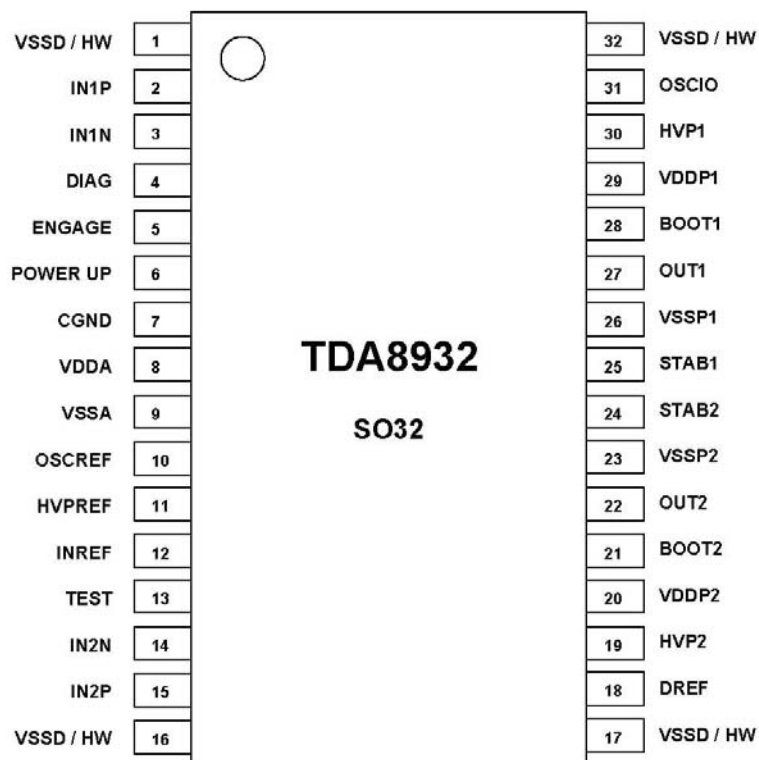
This section shows the internal block diagrams and pin configurations of ICs that are drawn as "black boxes" in the electrical diagrams (with the exception of "memory" and "logic" ICs).

9.3.1 IC Data Sheets TDA8932(U801)

Function Block Diagram

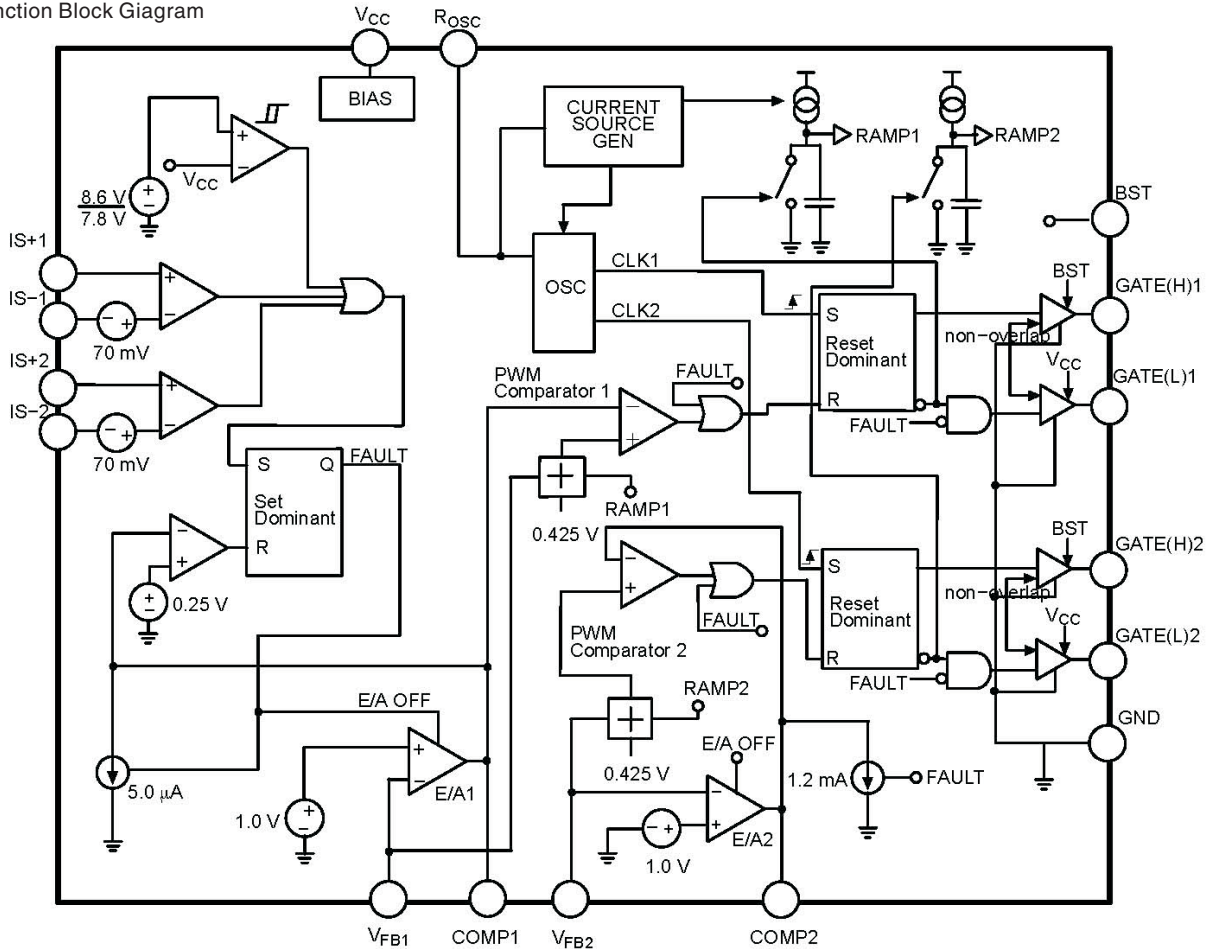


Pin Configuration



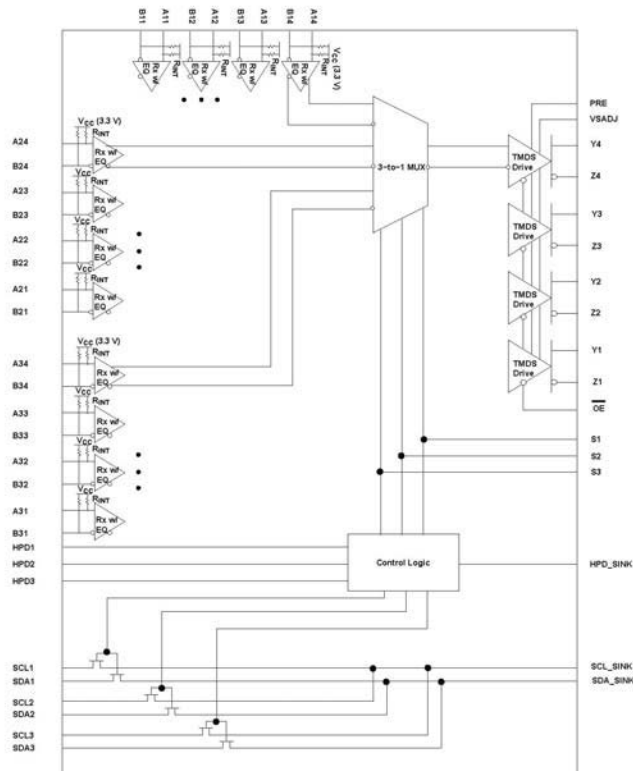
9.3.2 IC Data Sheet NPC5422A(U101)

Function Block Diagram



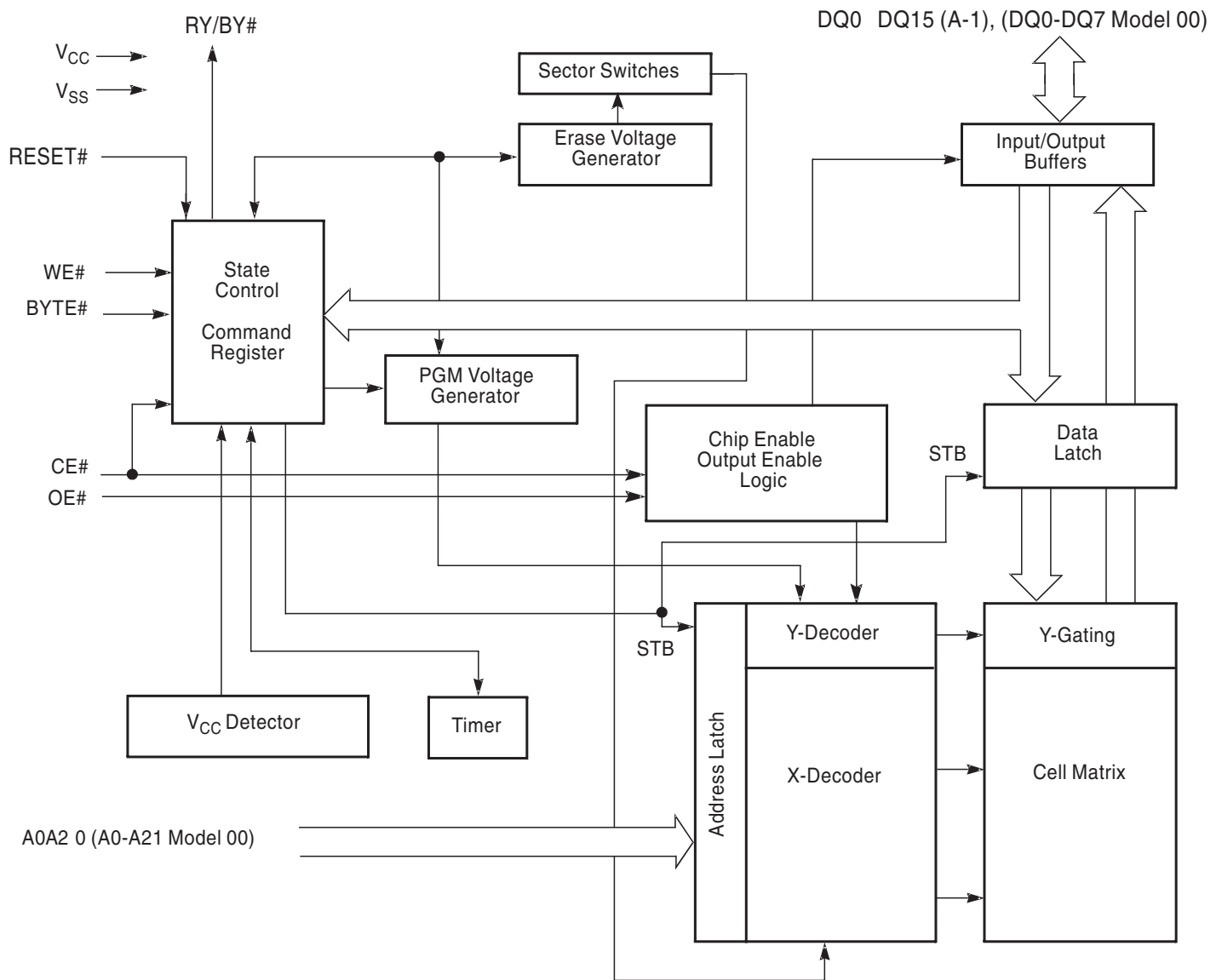
9.3.3 IC Data Sheet TMD5341A

Function Block Diagram

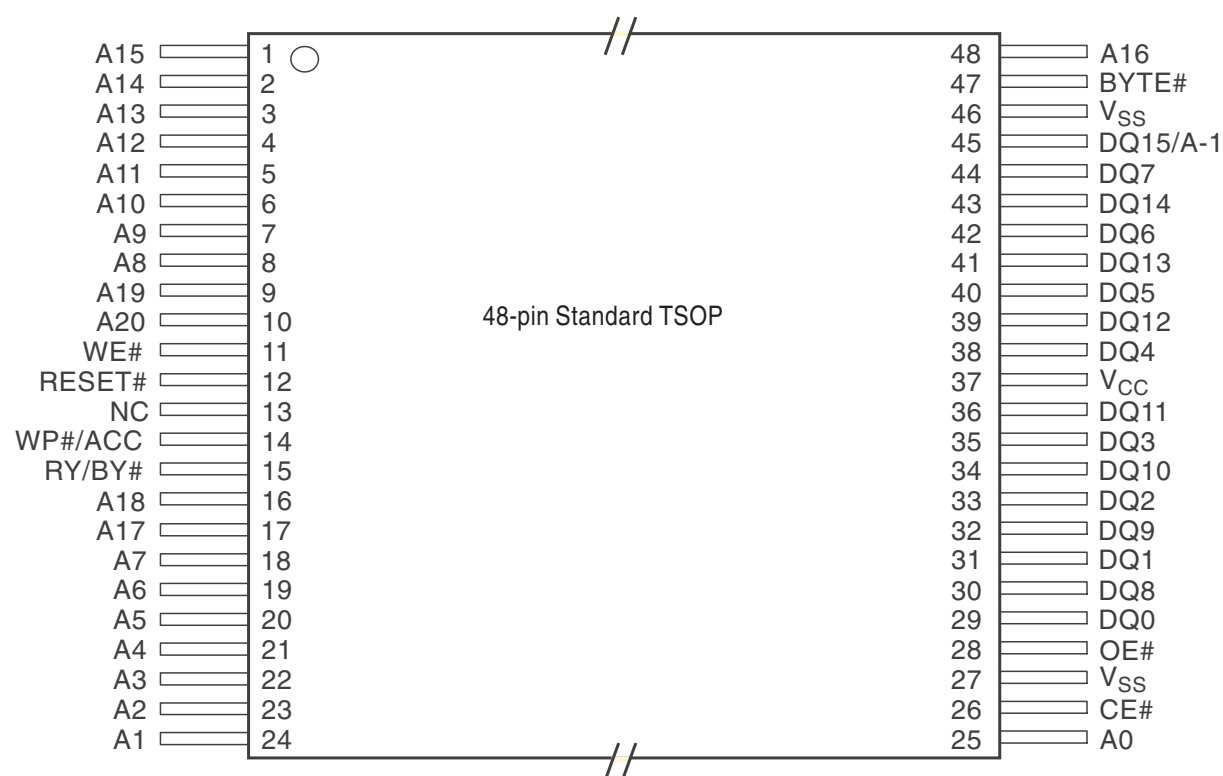


9.3.5 IC Data Sheets-S29AL032D(U350)

Function Diagram

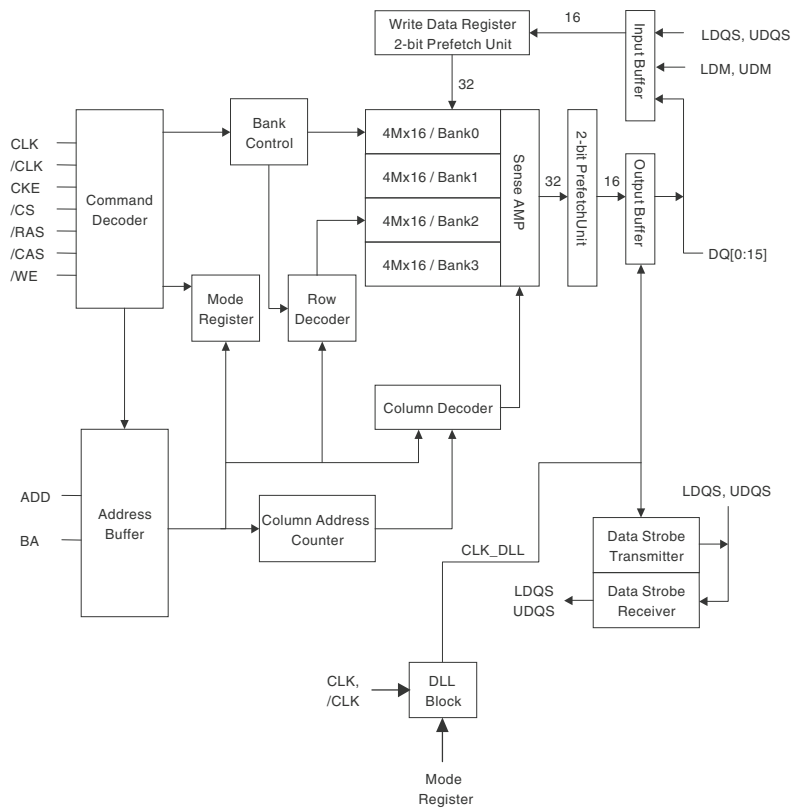


Pin Configuration



9.3.6 IC Data Sheets-HY5DU561622ETP-5(U501)

Function Diagram



Pin Configuration

x8	x16					x16	x8
VDD	VDD	1		66	VSS	VSS	
DQ0	DQ0	2		65	DQ15	DQ15	
VDDQ	VDDQ	3		64	VSSQ	VSSQ	
NC	DQ1	4		63	DQ14	NC	
DQ1	DQ2	5		62	DQ13	DQ6	
VSSQ	VSSQ	6		61	VDDQ	VDDQ	
NC	DQ3	7		60	DQ12	NC	
DQ2	DQ4	8		59	DQ11	DQ5	
VDDQ	VDDQ	9		58	VSSQ	VSSQ	
NC	DQ5	10		57	DQ10	NC	
DQ3	DQ6	11		56	DQ9	DQ4	
VSSQ	VSSQ	12		55	VDDQ	VDDQ	
NC	DQ7	13		54	DQ8	NC	
NC	NC	14		53	NC	NC	
VDDQ	VDDQ	15	400mil X 875mil	52	VSSQ	VSSQ	
NC	LDQS	16	66pin TSOP -II	51	UDQS	DQS	
NC	NC	17	0.65mm pin pitch	50	NC	NC	
VDD	VDD	18	(Lead free)	49	VREF	VREF	
NC	NC	19		48	VSS	VSS	
NC	LDM	20		47	UDM	DM	
/WE	/WE	21		46	/CK	/CK	
/CAS	/CAS	22		45	CK	CK	
/RAS	/RAS	23		44	CKE	CKE	
/CS	/CS	24		43	NC	NC	
NC	NC	25		42	A12	A12	
BA0	BA0	26		41	A11	A11	
BA1	BA1	27		40	A9	A9	
A10/AP	A10/AP	28		39	A8	A8	
A0	A0	29		38	A7	A7	
A1	A1	30		37	A6	A6	
A2	A2	31		36	A5	A5	
A3	A3	32		35	A4	A4	
VDD	VDD	33		34	VSS	VSS	

9.3.7 IC Data Sheet MT5373AJ(U301)

PIN ASSIGNMENT(MT5373)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
A	RA13	RA1	RA5	RA9	RA12	RDQ29	RDQS3_	RDQ25	RDQ21	RDQS2_	RCLK1	RDQ20	RDQ63	RDQ62	RDQ53	RDQS6_	RDQ49
B	RA8	RA11	RA10	RA3	RA7	RDQ26	RDQS3	RDQ27	RDQ18	RDQS2	RCLK1_	RDQ61	RDQM7	RDQ57	RDQ50	RDQS6	RDQ51
C	RA4	RA6	RBA1	RRAS_	RCAS_	RDQ24	RDQM3	RDQ28	RDQ16	RDQM2	RDQ17	RDQ58	RDQS7	RDQ59	RDQ48	RDQM6	RDQ52
D	RA0	RA2	RWE_	RBA0	RCS_	RDQ31	RDQ30	RVREF	RDQ23	RDQ22	RDQ19	RDQ56	RDQS7_	RDQ60	RDQ55	RDQ54	RVREF
E	RCKE	RDQ7	RDQ4	RDQ3	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO
F	RDQ1	RDQ6	RDQM0	RVREF	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO	VCC2IO
G	RDQS0	RDQS0_	RDQ7	RDQ0	VCC2IO	VCC2IO											
H	RDQ2	RDQ5	RDQ12	RDQ11	VCC2IO	VCC2IO											
J	RDQ9	RDQ14	RDQS1_	RDQS1	VCC2IO	VCC2IO											
K	RDQM1	RDQ15	RDQ8	RDQ10	VCC2IO	VCC2IO											
L	RCLK0	RCLK0_	RDQ13	RDQ36	VCC2IO	VCC2IO											
M	RDQ35	RDQ33	RDQ38	RDQM4	VCC2IO	VCC2IO											
N	RDQS4	RDQS4_	RDQ39	RVREF	VCC2IO	VCC2IO											
P	RDQ32	RDQ34	RDQ37	RDQ44	VCC2IO	VCC2IO											
R	RDQ43	RDQ41	RDQ46	RDQM5	VCC2IO	VCC2IO											
T	RDQS5	RDQS5_	RDQ47	RDQ40	VCC2IO	VCC2IO											
U	RDQ42	RDQ45	REXTUP	REXTDN	VCC2IO	VCC2IO											
V	PDCE1_	PDCE1_	PDCE2_	PDVS1	VCC3IO	VCC3IO											
W	PDCE_	PDIORD_	PDIOWR_	PDWE_	VCC3IO	VCC3IO											
Y	PDIREQ_	PDCTRLVP	PDVS2	PDRESET	VCC3IO	VCC3IO											
AA	PDWAIT_	PDINPACK	PDREG_	PDIOIS16	VCC3IO	VCC3IO											
AB	PDCE2_	PDENPOD	POCE2_	POCE1_	VCC3IO	VCC3IO											
AC	POCE0_	POCE0_	PDA1	PDD0													
AD	PDD1	PDD2	PDD3	PDD4													
AE	PDD5	PDD6	PDD7	PDA0													
AF	PDA17	PDA16	PDA15	PDA14													
AG	PDA13	PDA12	PDA11	PDA10													
AH	PDA9	PDA20	PDA21	POWE_													
AJ	PDA22	PDA19	PDA18	PDA8													
AK	PDA7	PDA6	PDA5	PDA4		VCC3IO	VCC3IO	VCC3IO	VCC3IO	VCC3IO							VCC3IO
AL	PDA3	PDA2	IDD8	IORDY	IDA0	SMCE_	MDATA1	SDIOD1	OPWM2	OSCL1	NC	PGND	AVSS_HC	AVSS_H0	AVSS_H1	AVSS_H2	OPCTRL4
AM	IDD9	IDD10	IDD11	IINTRQ	ICS1_	SDIOCMD	MDATA0	SDIOD2	OPWM1	OSDA1	OWRP2	PVCC	AVCC_HC	AVCC_H0	AVCC_H1	AVCC_H2	OPCTRL5
AN	IDD12	IDD13	IDIOR_	IDA1	ICS0_	SDIOD0	DCLK	SDIOD3	OPWM0	OSDA0	OSCL2	CVCC12	RXC_B	RX0B	RX1B	RX2B	OPCTRL6
AP	IDD14	IDD15	IDIOR_	IDA2	IRESET_	SDIOCLK	MCLK	OIRO	PWR5V	OSCL0	OSDA2	EXT_RES	RXC	RX0	RX1	RX2	OPCTRL7
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

	13	14	15	16	17
N					
P					
R					
T					
U					
V					
W					
Y					
AA					
AB					

DDR SIGNAL (120)

VCC3IO CORE POWER 1.2V

xxxx Analog Power

NOR Flash / POD (54)

VCC2IO DDR POWER 2.5V / 1.8V

xxxx Analog Ground

ATA/CF/MS/SD/XD/SDIO (29)

VCC3IO IO POWER 3.3V

GPIO

Digital GND

18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
GPIO_0	GPIO_4	GPIO_8	GPIO_12	JRTCK	A0P	A1P	A2P	CK1P	A3P	LVDDB	TP3	DACVREF	R	G	B	SVM	A
GPIO_1	GPIO_5	GPIO_9	JTRST_	JTMS	A0N	A1N	A2N	CK1N	A3N	LVDDC	TN3	AVCC_VPIFS		DACVDDC	DACVDDB	DACVDDA	B
GPIO_2	GPIO_6	GPIO_10	JTDI	JTCK	A4P	A5P	A6P	CK2P	A7P	LVSSB	LVDDA	DA+VSSB	DA+VSSA	ECNTL0	ELREQ	ECLK	C
GPIO_3	GPIO_7	GPIO_11	JTDO	LVSSA	A4N	A5N	A6N	CK2N	A7N	LVSSA	AVSS_VPIDA+VSSA	ELPS	ECNTL1	EDATA0	EDATA1		D
VCC3IO	VCC3IO	VCC3IO	VCC3IO	VCC3IO									U2RX	ELINKON	EDATA2	EDATA3	E
VCCK	VCCK	VCCK	VCCK	VCCK								VCCK	U2TX	U2CTS	EDATA4	EDATA5	F
												VCCK	T0DATA0	U2RTS	EDATA6	EDATA7	G
												VCCK	T0DATA1	T0DATA2	T0DATA3	T0DATA4	H
												VCCK	T0DATA5	T0DATA6	T0DATA7	T0SYNC	J
												VCCK	AOLRCK	AOSDATA	T0VALID	T0CLK	K
												VCC3IO	AOSDATA	AOSDATA	AOBCK	AOMCLK	L
												VCC3IO	AOSDATA	AOSDATA	AO2BCK	AO2MCLK	M
												VCC3IO	AO2LRCK	AO2SDATA	AALIN	ASPDIIF	N
												VCC3IO	GPIO_13	GPIO_14	GPIO_15	GPIO_16	P
													GPIO_17	GPIO_18	GPIO_19	GPIO_20	R
													GPIO_21	AVSS0_ADAC	AVSS0_ADAC	AVCC1_ADAC	T
													GPIO_22	ADAC_VC	AR2	AL2	U
													GPIO_23	AVCC0_ADAC	AR1	ALT	V
													AVSS_AADC	AVCC_AADC	MPX2	MPX1	W
													AVCC_DVS	NC	TN2	TP2	Y
													AVSS_VFE0	AVCC_VFE0	CVBS1	CVBS0	AA
													AVSS_VAD0	AVCC_VAD0	CVBS3	CVBS2	AB
													AVSS_VAD1	AVCC_VAD1	SC0	SY0	AC
													AVSS_VFE1	AVCC_VFE1	SC1	SY1	AD
													AVSS_AV33	AVCC_AV33	SC2	SY2	AE
													TN1	TP1	PR1N	PR1P	AF
													AVSS_B2RPPLL	AVSS_APLL	PB1N	PB1P	AG
													AVSS_SYSPLL	SOY1	Y1N	Y1P	AH
													AVSS_CPUPLL	AVCC_APLL	PR0N	PR0P	AJ
													AVSS_ADCPLL	AVCC_B2RPPLL	PB0N	PB0P	AK
OPCTRL0	U0RX	U0TX	ADIN2	ADIN4	VID15	VID11	VID7	VID3	VID0	VIVSYNC	AVSS_HDMIPLL	PSCANPL_L	AVSS_DMPLL	SOY0	Y0N	Y0P	AL
OPCTRL1	ORESET_	XREGVDD	PWM2VRE	ADIN3	AVSS_SR	VID12	VID8	VID4	VID1	VIHSYNC	AVCC_HDMIPLL	AVCC_CPUPLL	AVCC_ADCPLL	AVCC_SYSPLL	RN	RP	AM
OPCTRL2	OIRI	C_XREG	ADIN1	XTALI	AVSS_XTA	VID13	VID9	VID5	VID2	VIDEN	PSCANPL_L	TN0	VSYNC	SOG	GN	GP	AN
OPCTRL3	OPWRSB	AVCC_SR	ADINO	XTALO	AVCC_XTA	VID14	VID10	VID6	VIDE_SOG	VIVCLK	AVCC_DMPLL	TP0	HSYNC	FB_IN	BN	BP	AP
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	

10. Spare Parts List

Sets Listed per Model Number (CTN)

37MF437B/37 (SBOM 1 & 3)

1050	9965 100 02576	LC370WU1-SL02 (1)
1050	9965 100 09504	LC370WU3-SLB1 (3)
1053	9965 100 03216	Scaler Board assy [S] (1)
1053	9965 100 09505	Scaler Board assy [S] (3)
1054	9965 100 03225	Power Supply assy [P]
1055	9965 000 45008	Side AV assy [SA]
1056	9965 000 44561	IR assy [I]
1057	9965 000 43803	Keyboard & Cntrl assy [K]
1187	9965 100 03387	Loudsp. 6Ω
8662	9965 100 05835	Cable 14p-14p 310mm
8850	9965 100 09502	Cable 51p-20*2p 180mm
8902	9965 100 03390	Cable 11p/90/11p
8905	9965 100 09501	Cable 12p-14p 170mm

42MF437B/37

1050	9965 100 06386	V420H1-L07 C1
1053	9965 100 03670	Scaler Board assy [S]
1054	9965 000 44559	Power Supply assy [P]
1055	9965 000 44560	Side AV assy [SA]
1056	9965 000 44561	IR assy [I]
1057	9965 000 43803	Keyboard & Cntrl assy [K]
1187	9965 100 03665	Speaker 6Ohm 10W
8352	9965 100 03662	Cable 6p/580/6p
8353	9965 100 03663	Cable 3p/490/3p
8662	9965 100 03666	Cable 14p/430/14p
8801	9965 000 44552	Cable 4p/475/3p2
8850	9965 100 03667	Cable 51p/230/20p2
8902	9965 100 03668	Cable 11p/180/11p
8903	9965 100 03664	Cable 12p/800/12p
8905	9965 100 03669	Cable 12p/200/14p

42PFL5432D/37

1050	9965 100 06386	V420H1-L07 C1
1053	9965 100 08583	Scaler Board assy [S]
1054	9965 000 44559	Power Supply assy [P]
1055	9965 000 44560	Side AV assy [SA]
1056	9965 000 44561	IR assy [I]
1057	9965 000 43803	Keyboard & Cntrl assy [K]
1187	9965 100 03665	Speaker 6Ohm 10W
8352	9965 000 44550	Cable 6p/580/6p
8353	9965 100 03663	Cable 3p/490/3p
8662	9965 100 08578	Cable 7-2p/410/14p
8801	9965 000 44552	Cable 4p/475/3p2
8850	9965 100 03667	Cable 51p/230/20p2
8902	9965 100 03668	Cable 11p/180/11p
8903	9965 100 09093	Cable 12p/800/12p
8906	9965 100 09094	Cable 12p/200/14p

47MF437B/37

1050	9965 000 45160	LC470WU4-SLA2
1053	9965 100 03207	Scaler Board assy [S]
1054	9965 000 45188	Power Supply assy [P]
1055	9965 000 44560	Side AV assy [SA]
1056	9965 000 44561	IR assy [I]
1057	9965 000 43803	Keyboard & Cntrl assy [K]

47PFL5422D/37

1050	9965 100 05890	V470H1-L03 CMO HD
1053	9965 100 09078	Scaler Board assy [S]
1054	9965 000 45188	Power supply
1055	9965 000 44560	Side AV assy [SA]
1056	9965 000 44561	IR assy [I]
1057	9965 000 43803	Keyboard & Cntrl assy [K]
1187	9965 100 06611	Loudsp. 6Ω 10W Bk
8353	9965 100 06612	Cable 3p-3p 450mm
8850	9965 100 06614	Cable 51p-20 2p 255mm
8902	9965 100 06613	Cable 11p-11p 150mm

IR & LED Panel [I]

Various

SW001	9965 000 35740	Tact Switch TSPB-2-NP
SW001	9965 000 44878	SFKHHPM25C0-PL
SW002	9965 000 35740	Tact Switch TSPB-2-NP
SW002	9965 000 44878	SFKHHPM25C0-PL



C001	9965 000 42228	100nF 16V X7R 0603
C002	9965 000 42673	10nF 50V Y5V 20% 0603
C003	9965 000 42673	10nF 50V Y5V 20% 0603
C004	9965 000 42673	10nF 50V Y5V 20% 0603
C005	9965 000 42400	1μF 10V Y5V 20% 0603
C006	9965 000 42673	10nF 50V Y5V 20% 0603



R001	9965 000 42218	220Ω 5% 1/10W
R002	9965 000 42219	2.2kΩ 5% 1/10W
R003	9965 000 42214	10kΩ 5% 1/10W
R004	9965 000 42213	100Ω 5% 1/10W
R005	9965 000 42219	2.2kΩ 5% 1/10W
R006	9965 000 42214	10kΩ 5% 1/10W
R007	9965 000 42218	220Ω 5% 1/10W
R008	9965 000 42212	0Ω 5% 1/10W



LED001	9965 100 02879	VS L-3WEGW
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Q001	9965 000 43944	BC847BW 100mA/45V
Q002	9965 000 43944	BC847BW 100mA/45V
Q003	9965 000 43944	BC847BW 100mA/45V
U001	9965 000 42727	TSOP34136SB1

Keyboard & Control Panel [K]

Various

SW030	9965 000 42278	Switch Tact SKQGAB
SW030	9965 000 42279	Switch SFKQGMA2125
SW031	9965 000 42278	Switch Tact SKQGAB
SW031	9965 000 42279	Switch SFKQGMA2125
SW032	9965 000 42278	Switch Tact SKQGAB
SW032	9965 000 42279	Switch SFKQGMA2125
SW033	9965 000 42278	Switch Tact SKQGAB
SW033	9965 000 42279	Switch SFKQGMA2125
SW034	9965 000 42278	Switch Tact SKQGAB
SW034	9965 000 42279	Switch SFKQGMA2125



C031	9965 000 42228	100nF 16V X7R 0603
CN030	9965 000 45270	Connector 3p m



R030	9965 000 44043	11kΩ 5% 1/10W
R031	9965 000 44045	4.3kΩ 5% 1/10W
R032	9965 000 44044	1.8kΩ 5% 1/10W
R033	9965 000 42224	470Ω 5% 1/10W
R034	9965 000 42212	0Ω 5% 1/10W

Power Supply Panel [P]

Various

F901	9965 100 02521	Fuse 5A 250V
F901	9965 100 04444	Fuse 250V 6.3A
FB903	9965 000 43424	Bead coil
FB904	9965 000 43424	Bead coil
FB905	9965 000 43424	Bead coil
FB913	9965 000 43424	Bead coil
FB914	9965 000 40066	Ferr. core BF30TA-2
FB914	9965 100 02511	Ferr. core 35Ω
FB915	9965 000 40066	Ferr. core BF30TA-2
FB915	9965 100 02511	Ferr. core 35Ω
FB916	9965 000 40066	Ferr. core BF30TA-2
FB916	9965 100 02511	Ferr. core 35Ω
FB917	9965 000 40066	Ferr. core BF30TA-2
FB917	9965 100 02511	Ferr. core 35Ω
FB918	9965 000 40066	Ferr. core BF30TA-2
FB918	9965 100 02511	Ferr. core 35Ω
FB919	9965 000 40066	Ferr. core BF30TA-2
FB919	9965 100 02511	Ferr. core 35Ω
FB920	9965 000 40066	Ferr. core BF30TA-2

FB920	9965 100 02511	Ferr. core 35Ω
FB921	9965 000 40066	Ferr. core BF30TA-2
FB921	9965 100 02511	Ferr. core 35Ω
FB922	9965 000 43357	Ferrite Bead
FB922	9965 000 43839	Ferrite Bead
FB923	9965 000 43357	Ferrite Bead
FB923	9965 000 43839	Ferrite Bead
FB924	9965 000 43357	Ferrite Bead
FB924	9965 000 43839	Ferrite Bead
FB925	9965 000 43357	Ferrite Bead
FB925	9965 000 43839	Ferrite Bead
FB926	9965 000 43918	75Ω W6 RH 3.5X10X
FB927	9965 000 43918	75Ω W6 RH 3.5X10X
SG1	9965 000 43423	GS41-201MA
SG2	9965 000 43423	GS41-201MA
SG3	9965 000 43423	GS41-201MA
SG4	9965 000 43423	GS41-201MA
ZD902	9965 000 43426	Trans Suppr 120V 5W
ZD902	9965 000 43434	P6KE120A DO-15
ZD904	9965 000 43426	Trans Suppr 120V 5W
ZD904	9965 000 43434	P6KE120A DO-15
ZD906	9965 000 44652	P4KE250A
ZD908	9965 000 43427	BZX79-B18 A
ZD908	9965 000 43430	BZX55-B18 A
ZD909	9965 100 04448	BZX79-C9V1



C900	9965 000 44612	1500pF 250V
C901	9965 000 43824	470pF 10% 250VAC
C902	9965 000 43824	470pF 10% 250VAC
C907	9965 000 43354	220uF 450V
C907	9965 000 45250	270uF 450V
C907	9965 100 02508	220uF 450V
C907	9965 100 02509	220uF 450V
C907	9965 100 03542	180uF 450V
C907	9965 100 03543	180uF 450V
C908	9965 000 43347	0.68uF 275V
C909	9965 000 43347	0.68uF 275V
C912	9965 000 36073	1μF 25V 0805
C912	9965 000 45251	1uF 25V 0805
C913	9965 000 44615	1nF 10% 50V 0805
C914	9965 000 36045	0.047uF -10% 50V
C915	9965 000 43411	470pF 5% 50V
C916	9965 000 36074	0.33μF 10% 25V 0805
C917	9965 000 36045	0.047uF -10% 50V
C917	9965 000 43409	33nF 10% 50V 0805
C917	9965 100 03562	47nF 10% 50V 0805
C918	9965 000 36074	0.33μF 10% 25V 0805
C919	9965 000 36073	1μF 25V 0805
C919	9965 000 45251	1uF 25V 0805
C920	9965 000 36040	0.1μF 10% 25V
C921	9965 000 43460	100UF -20% 25V
C922	9965 000 36040	0.1μF 10% 25V
C923	9965 000 36074	0.33μF 10% 25V 0805
C924	9965 000 36074	0.33μF 10% 25V 0805
C926	9965 000 43457	1500pF 1kV
C934	9965 100 02505	47uF 25V
C935	9965 000 43348	63G214J225GMC
C935	9965 000 43822	2.2μF 5% 450V
C937	9965 000 36040	0.1μF 10% 25V
C938	9965 000 43348	63G214J225GMC
C938	9965 000 43822	2.2μF 5% 450V
C938	9965 000 44617	1uF 5% 450V
C938	9965 000 44618	1uF 5% 450V
C939	9965 100 02495	0.01uF 5% 100V
C939	9965 100 02496	0.01uF 5% 100V
C939	9965 100 03380	0.018uF 5% 100V
C939	9965 100 03381	0.018uF 5% 100V
C940	9965 100 02495	0.01uF 5% 100V
C940	9965 100 02496	0.01uF 5% 100V
C940	9965 100 03581	0.01uF 5% 100V
C942	9965 000 36040	0.1μF 10% 25V
C943	9965 000 36040	0.1μF 10% 25V
C944	9965 000 44620	200pF 10% 500V
C944	9965 100 03584	1500pF 10% 500V
C945	9965 000 43458	1.5nF 10% 500V
C945	9965 100 03584	1500pF 10% 500V
C946	9965 100 02510	2.2uF 50V
C947	9965 000 43462	6.8μF 50V
C947	9965 100 03586	10uF 50V
C948	9965 000 44620	200pF 10% 500V
C951	9965 000 43355	1500uF 35V
C951	9965 000 45253	1500uF 35V
C951	9965 100 04045	1500uF 35V
C952	9965 000 43355	1500uF 35V
C952	9965 000 44331	1000uF 35V
C952	9965 000 45253	1500uF 35V
C952	9965 100 04045	1500uF 35V

C953	9965 000 43355	1500uF 35V
C953	9965 000 44331	1000uF 35V
C953	9965 000 45253	1500uF 35V
C953	9965 100 04045	1500uF 35V
C954	9965 000 43461	47uF 35V
C954	9965 100 02507	47uF 35V
C955	9965 000 44623	2200uF 16V
C956	9965 000 43350	15N/100V PPN
C956	9965 000 44331	1000uF 35V
C956	9965 100 02498	22nF 5% 100V
C956	9965 100 03341	0.022uF 5% 100V
C956	9965 100 04436	0.015uF 5% 100V
C957	9965 100 02506	10uF +/-20% 25V
C958	9965 100 02505	47uF 25V
C959	9965 000 43411	470pF 5% 50V
C960	9965 000 43411	470pF 5% 50V
C960	9965 100 04437	0.033uF 5% 100V
C960	9965 100 04438	0.033uF 5% 100V
C961	9965 000 36074	0.33uF 10% 25V 0805
C961	9965 000 43411	470pF 5% 50V
C962	9965 000 43411	470pF 5% 50V
CN903	9965 100 04439	Connector 12p m
CN905	9965 100 04439	Connector 12p m

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R913	9965 000 43395	33kΩ 5% 1/8W
R914	9965 000 43876	4.7kΩ 5% 1/8W
R915	9965 000 43390	22kΩ 5% 1/8W
R915	9965 000 43395	33kΩ 5% 1/8W
R916	9965 000 43395	33kΩ 5% 1/8W
R918	9965 000 39756	47k Ohm 5% 1/8W
R918	9965 000 42735	47kΩ 5% 1/8W
R922	9965 000 43384	12k Ohm -5% 1/8W
R923	9965 000 43393	330Ω 5% 1/8W
R924	9965 000 43902	0.15Ω 1% 1W
R924	9965 000 44638	0.12Ohm 1% 1W
R925	9965 000 36963	1kΩ 5% 0.1W
R925	9965 000 43380	1kΩ 1/10W
R926	9965 000 43420	0.1Ω 1% 1W
R926	9965 000 43902	0.15Ω 1% 1W
R926	9965 000 44638	0.12Ohm 1% 1W
R927	9965 000 43380	1kΩ 1/10W
R927	9965 000 44639	180Ω 5% 2W
R927	9965 100 03556	1.5kΩ 5% 1/8W
R928	9965 000 44642	8.2kΩ 1% 1/10W
R929	9965 000 42735	47kΩ 5% 1/8W
R930	9965 000 36963	1kΩ 5% 0.1W
R930	9965 000 43380	1kΩ 1/10W
R931	9965 000 43380	1kΩ 1/10W
R932	9965 100 02482	330Ω 5% 1/6W
R933	9965 000 36963	1kΩ 5% 0.1W
R933	9965 000 43380	1kΩ 1/10W
R934	9965 000 43393	330Ω 5% 1/8W
R935	9965 000 43874	47Ω 5% 1/8W
R936	9965 000 36965	100kΩ 5% 0.1W
R936	9965 000 39749	100kΩ 0805
R937	9965 000 43389	2.2kΩ 1% 1/8W
R938	9965 000 43876	4.7kΩ 5% 1/8W
R939	9965 000 43387	18kΩ 1% 1/6W
R940	9965 000 44641	1.5kΩ 1% 1/8W
R941	9965 000 43389	2.2kΩ 1% 1/8W
R942	9965 000 43379	100Ω 5% 1/8W
R942	9965 000 43391	33Ω 5% 1/8W
R942	9965 000 43874	47Ω 5% 1/8W
R943	9965 000 43389	2.2kΩ 1% 1/8W
R944	9965 000 44642	8.2kΩ 1% 1/10W
R945	9965 000 44643	330Ω 1% 1/8W
R946	9965 000 43876	4.7kΩ 5% 1/8W
R947	9965 000 39756	47k Ohm 5% 1/8W
R947	9965 000 42735	47kΩ 5% 1/8W
R948	9965 000 36970	1.5kΩ 5% 0.1W
R948	9965 000 43874	47Ω 5% 1/8W
R949	9965 000 43420	0.1Ω 1% 1W
R949	9965 000 43902	0.15Ω 1% 1W
R950	9965 000 43399	560kΩ 5%/8W
R951	9965 000 36963	1kΩ 5% 0.1W
R951	9965 000 43380	1kΩ 1/10W
R952	9965 000 43379	100Ω 5% 1/8W
R953	9965 000 43396	330kΩ 5% 1/8W
R956	9965 000 43386	150kΩ 5% 1/8W
R956	9965 000 44644	150kΩ 1% 1/8W
R957	9965 000 39749	100kΩ 0805
R958	9965 000 43396	330kΩ 5% 1/8W
R958	9965 000 45262	300kΩ 5% 1/8W
R959	9965 100 02488	220kΩ 5% 0.25W
R960	9965 100 02488	220kΩ 5% 0.25W
R961	9965 100 02487	180kΩ 5% 0.25W
R962	9965 000 42735	47kΩ 5% 1/8W
R963	9965 000 43418	2.2Ω 5% 1/6W
R964	9965 000 43418	2.2Ω 5% 1/6W
R965	9965 000 44647	2.2Ω 5% 1/4W
R969	9965 000 44648	470kΩ 1% 0.25W

R970	9965 000 44648	470kΩ 1% 0.25W
R971	9965 000 44648	470kΩ 1% 0.25W
R972	9965 000 44642	8.2kΩ 1% 1/10W
R973	9965 000 43400	620Ω 1% 1/8W
R974	9965 100 02481	0.3Ω 1% 0.25W
R975	9965 000 43876	4.7kΩ 5% 1/8W
R976	9965 000 43874	47Ω 5% 1/8W
R977	9965 000 43976	10Ω 5% 1/4W
R978	9965 000 43396	330kΩ 5% 1/8W
R979	9965 000 36963	1kΩ 5% 0.1W
R979	9965 000 45263	120kOhm 5% 1W
R980	9965 000 43394	3.3kΩ 5% 1/8W
R980	9965 000 43974	1Ω 5% 1/8W
R981	9965 000 42735	47kΩ 5% 1/8W
R981	9965 000 43974	1Ω 5% 1/8W
R982	9965 000 45264	15Ohm 5% 1/8W
R983	9965 000 45265	15Ohm 5% 1/8W
R984	9965 000 43402	1 Ohm 5% 1206
R985	9965 000 43872	2.2kΩ 5% 1/8W
R987	9965 000 43393	330Ω 5% 1/8W
RV902	9965 000 43346	VDR DC 1MA/510 845V
RV902	9965 100 02714	TVR14511KFC4FY

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L910	9965 000 44634	Coil 2.4μH 20% 4.5MΩ
L911	9965 000 44635	Coil 2.3uH 20% 7.2MΩ
L912	9965 000 43362	Line Filter 8mH 4.0A
L913	9965 000 43362	Line Filter 8mH 4.0A
L914	9965 000 43358	Filter 300μH 0R085
L914	9965 100 03226	Choke 380μH 130Ω
L914	9965 100 03227	Choke 380μH 130Ω
L914	9965 100 04440	Choke 270uH 70mOhm
L915	9965 000 43425	Coil 47uH 10%
L916	9965 000 43425	Coil 47uH 10%
T904	9965 100 02520	XFMR HJC-S6191
T904	9965 100 04441	PPH6012AL
T905	9965 000 44651	Power transformer
T905	9965 100 03228	XFMR HJC-S6192
T907	9965 100 04442	HJC-S6150
T907	9965 100 04443	PT-007446
TH902	9965 000 43454	NTC 0.75Ω 15%

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D901	9965 000 43371	STTH8L06FP
D906	9965 100 03321	LL4148-GSO8
D906	9965 100 03327	BAS32L
D907	9965 000 40067	RGp10-DO-204AL
D907	9965 000 43435	BYT42D
D907	9965 000 43436	RGp10D
D908	9965 000 40067	RGp10-DO-204AL
D908	9965 000 43435	BYT42D
D908	9965 000 43436	RGp10D
D910	9965 100 03321	LL4148-GSO8
D910	9965 100 03327	BAS32L
D911	9965 000 40067	RGp10-DO-204AL
D911	9965 000 43435	BYT42D
D911	9965 000 43436	RGp10D
D912	9965 000 40067	RGp10-DO-204AL
D912	9965 000 43435	BYT42D
D912	9965 000 43436	RGp10D
D914	9965 100 02829	BAV103
D914	9965 100 02830	BAV103
D915	9965 100 02829	BAV103
D915	9965 100 02830	BAV103
D918	9965 100 02529	BAV21
D918	9965 100 04449	BAV21
D919	9965 100 02829	BAV103
D919	9965 100 02830	BAV103
D920	9965 100 02529	BAV21
D922	9965 000 43373	STPS40H100CW
D922	9965 100 03554	SP20100R
D922	9965 100 03555	STPS20H100CFP
D924	9965 000 43437	UF1007 1A 1000V
D924	9965 000 43438	STTH110
D925	9965 000 43437	UF1007 1A 1000V
D925	9965 000 43438	STTH110
D926	9965 000 43439	DIODE
D926	9965 000 43440	SBYV27-200-E3
D927	9965 000 43372	STPS10H100CFP
D927	9965 000 44611	SP1060
D927	9965 100 02528	MBRF1060CT
D928	9965 000 43439	DIODE
D928	9965 000 43440	SBYV27-200-E3
D929	9965 100 02829	BAV103
D929	9965 100 02830	BAV103
D930	9965 100 04449	BAV21



IC902	9965 000 44633	SG6961
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IC904	9965 000 36353	TEA1507P
IC904	9965 100 03539	TEA1507P/N1
IC907	9965 000 36353	TEA1507P
IC907	9965 100 03539	TEA1507P/N1
IC909	9965 000 40055	PC123 Y82FZ0F
IC909	9965 000 40056	TCET1103G
IC910	9965 000 40055	PC123 Y82FZ0F
IC910	9965 000 40056	TCET1103G
IC911	9965 000 40055	PC123 Y82FZ0F
IC911	9965 000 40056	TCET1103G
IC912	9965 000 43441	TL431ACZ
IC913	9965 000 43441	TL431ACZ
IC914	9965 100 04447	TEA1761T
Q901	9965 000 43368	STW18NK80Z
Q901	9965 000 43864	Mosfet STP10NK80ZFP
Q902	9965 000 43369	Transistor 26A 600V
Q902	9965 000 44610	2SK3681-01
Q902	9965 100 03548	FCA20N60
Q902	9965 100 03550	STW25NM60N
Q908	9965 000 44636	STP7NK80ZFP ST
Q908	9965 100 02480	2SK3530-01MRSC
Q912	9965 000 37785	BC857CG
Q912	9965 000 40046	BC857 SOT23
Q913	9965 000 37785	BC857CG
Q913	9965 000 40046	BC857 SOT23
Q914	9965 000 37785	BC857CG
Q914	9965 000 40046	BC857 SOT23
Q915	9965 000 42648	BC847C
Q915	9965 000 42649	BC847C
Q915	9965 100 02479	BC847C
Q916	9965 000 42648	BC847C
Q916	9965 000 42649	BC847C
Q916	9965 100 02479	BC847C
Q917	9965 100 04445	FDP3632
Q918	9965 100 04435	BC337-40
BD901	9965 000 43370	GBU8J
BD901	9965 000 43858	Bridge 6A/600V
BD901	9965 000 44288	GBU606
BD901	9965 000 44609	GBU805
BD901	9965 100 03552	GBU605
BD901	9965 100 04061	GBU806
BD901	9965 100 04446	KBU8J

Scale Board [S]

Various

1257	9965 100 03217	Tuner FQD1236
1257	9965 100 03219	Tuner TDQU4-507A assy
1257	9965 100 03671	Tuner + Eeprom
1257	9965 100 03673	Tuner + Eeprom
1258	9965 100 03675	NOR Flash Assy
1258	9965 100 08586	Nor flash assy
1258	9965 100 09080	NOR Flash Assy(CMO)
1258	9965 100 09506	NOR Flash Assy
1301	9965 100 08587	EEprom assy
1301	9965 100 09081	EEPROM Assy
1301	9965 100 09507	EEPROM assy LPL PH
1302	9965 100 08588	EEPROM assy
1302	9965 100 09082	EEPROM assy
1302	9965 100 09508	EEPROM Assy
F901	9965 100 02521	Fuse 5A 250V
FB201	9965 000 42268	220Ω at 100MHz 0805
FB202	9965 100 03317	Bead 120Ω/500mA
FB203	9965 000 42268	220Ω at 100MHz 0805
FB250	9965 000 43995	Bead 600Ω/200mA
FB250	9965 000 43997	Bead 600Ω/500mA
FB251	9965 000 43995	Bead 600Ω/200mA
FB251	9965 000 43997	Bead 600Ω/500mA
FB252	9965 000 43995	Bead 600Ω/200mA
FB252	9965 000 43997	Bead 600Ω/500mA
FB253	9965 000 43995	Bead 600Ω/200mA
FB253	9965 000 43997	Bead 600Ω/500mA
FB254	9965 000 42268	220Ω at 100MHz 0805
FB255	9965 000 43995	Bead 600Ω/200mA
FB255	9965 000 43997	Bead 600Ω/500mA
FB256	9965 000 43995	Bead 600Ω/200mA
FB256	9965 000 43997	Bead 600Ω/500mA
FB257	9965 000 43995	Bead 600Ω/200mA
FB257	9965 000 43997	Bead 600Ω/500mA
FB350	9965 000 43995	Bead 600Ω/200mA
FB350	9965 000 43997	Bead 600Ω/500mA
FB351	9965 000 43995	Bead 600Ω/200mA
FB351	9965 000 43997	Bead 600Ω/500mA
FB352	9965 000 43995	Bead 600Ω/200mA
FB352	9965 000 43997	Bead 600Ω/500mA
FB401	9965 000 43995	Bead 600Ω/200mA
FB401	9965 000 43997	Bead 600Ω/500mA
FB402	9965 000 43995	Bead 600Ω/200mA
FB402	9965 000 43997	Bead 600Ω/500mA

FB404	9965 000 43995	Bead 600Ω/200mA	C123	9965 000 43979	1nF 5% 50V 0603	C214	9965 100 08199	47uF 16V
FB404	9965 000 43997	Bead 600Ω/500mA	C124	9965 000 37776	100μF 25V	C215	9965 000 42228	100nF 16V X7R 0603
FB405	9965 000 43995	Bead 600Ω/200mA	C124	9965 000 43645	100μF 25V	C216	9965 000 42260	10nF 50V X7R 0603
FB405	9965 000 43997	Bead 600Ω/500mA	C124	9965 100 08191	100uF 16V	C218	9965 000 35998	220uF 16V
FB406	9965 000 43995	Bead 600Ω/200mA	C124	9965 100 08192	100uF 16V	C218	9965 000 43917	1000μF 25V
FB406	9965 000 43997	Bead 600Ω/500mA	C125	9965 000 35998	220uF 16V	C219	9965 000 42228	100nF 16V X7R 0603
FB407	9965 000 43995	Bead 600Ω/200mA	C125	9965 000 43916	470μF 20% 25V	C250	9965 000 42228	100nF 16V X7R 0603
FB407	9965 000 43997	Bead 600Ω/500mA	C126	9965 000 43981	3.9nF 1% 50V 0603	C251	9965 000 42232	47nF 16V X7R 0603
FB408	9965 000 43995	Bead 600Ω/200mA	C127	9965 000 43916	470μF 20% 25V	C252	9965 000 42260	10nF 50V X7R 0603
FB408	9965 000 43997	Bead 600Ω/500mA	C127	9965 000 44823	470uF 16V	C254	9965 000 42260	10nF 50V X7R 0603
FB409	9965 000 43995	Bead 600Ω/200mA	C128	9965 000 43981	3.9nF 1% 50V 0603	C255	9965 000 42228	100nF 16V X7R 0603
FB409	9965 000 43997	Bead 600Ω/500mA	C129	9965 000 42262	100nF 50V Y5V 0603	C256	9965 000 42228	100nF 16V X7R 0603
FB410	9965 000 43995	Bead 600Ω/200mA	C130	9965 000 42235	47μF 25V 6.3X5.3mm	C257	9965 000 42403	10μF 25V 20% 1210
FB410	9965 000 43997	Bead 600Ω/500mA	C130	9965 100 03679	47uF 16V	C257	9965 100 08198	10uF 10V 0805
FB501	9965 100 03317	Bead 120Ω/500mA	C130	9965 100 03680	47uF 16V	C258	9965 000 42228	100nF 16V X7R 0603
FB600	9965 000 43997	Bead 600Ω/200mA	C130	9965 100 03697	47uF 25V	C259	9965 000 42228	100nF 16V X7R 0603
FB660	9965 000 43997	Bead 600Ω/500mA	C130	9965 100 05108	47uF 25V	C260	9965 000 42680	18pF 50V NPO 5% 0603
FB661	9965 000 43995	Bead 600Ω/200mA	C130	9965 100 08199	47uF 16V	C261	9965 000 42680	18pF 50V NPO 5% 0603
FB661	9965 000 43997	Bead 600Ω/500mA	C131	9965 000 42605	470μF 25V EB 10X13mm	C262	9965 000 42228	100nF 16V X7R 0603
FB662	9965 000 43995	Bead 600Ω/200mA	C131	9965 000 43915	470μF 25V	C263	9965 000 42228	100nF 16V X7R 0603
FB662	9965 000 43997	Bead 600Ω/500mA	C131	9965 100 03677	470uF 25V	C264	9965 000 42403	10μF 25V 20% 1210
FB663	9965 000 43995	Bead 600Ω/200mA	C132	9965 000 43980	100nF 20% 25V 0603	C264	9965 100 08198	10uF 10V 0805
FB663	9965 000 43997	Bead 600Ω/500mA	C133	9965 000 44243	4.7uF 10V -20%	C265	9965 000 42228	100nF 16V X7R 0603
FB700	9965 000 43995	Bead 600Ω/200mA	C134	9965 000 42231	330pF 50V NPO 0603	C266	9965 000 42228	100nF 16V X7R 0603
FB700	9965 000 43997	Bead 600Ω/500mA	C150	9965 000 42235	47μF 25V 6.3X5.3mm	C267	9965 000 42228	100nF 16V X7R 0603
FB701	9965 000 43995	Bead 600Ω/200mA	C150	9965 100 03679	47uF 16V	C268	9965 000 42228	100nF 16V X7R 0603
FB701	9965 000 43997	Bead 600Ω/500mA	C150	9965 100 03680	47uF 16V	C269	9965 000 42228	100nF 16V X7R 0603
FB703	9965 000 42268	220Ω at 100MHz 0805	C150	9965 100 03697	47uF 25V	C270	9965 000 42228	100nF 16V X7R 0603
FB725	9965 000 43995	Bead 600Ω/200mA	C150	9965 100 05108	47uF 25V	C271	9965 000 42228	100nF 16V X7R 0603
FB725	9965 000 43997	Bead 600Ω/500mA	C150	9965 100 08199	47uF 16V	C272	9965 000 42228	100nF 16V X7R 0603
FB726	9965 000 43995	Bead 600Ω/200mA	C151	9965 000 43980	100nF 20% 25V 0603	C273	9965 000 42228	100nF 16V X7R 0603
FB726	9965 000 43997	Bead 600Ω/500mA	C155	9965 000 42235	47μF 25V 6.3X5.3mm	C274	9965 000 42403	10μF 25V 20% 1210
FB760	9965 000 43995	Bead 600Ω/200mA	C155	9965 100 03679	47uF 16V	C274	9965 100 08198	10uF 10V 0805
FB760	9965 000 43997	Bead 600Ω/500mA	C155	9965 100 03680	47uF 16V	C275	9965 000 42228	100nF 16V X7R 0603
FB761	9965 000 43995	Bead 600Ω/200mA	C155	9965 100 03697	47uF 25V	C276	9965 000 42228	100nF 16V X7R 0603
FB761	9965 000 43997	Bead 600Ω/500mA	C155	9965 100 05108	47uF 25V	C277	9965 000 42228	100nF 16V X7R 0603
FB801	9965 000 43918	75Ω W6 RH 3.5X10X	C155	9965 100 08199	47uF 16V	C278	9965 000 42228	100nF 16V X7R 0603
FB801	9965 000 43919	80Ω BF30TA 3.5X9X	C156	9965 000 43980	100nF 20% 25V 0603	C279	9965 000 42228	100nF 16V X7R 0603
FB851	9965 000 42268	220Ω at 100MHz 0805	C157	9965 000 42698	10μF 16V 20% 1206	C280	9965 000 42228	100nF 16V X7R 0603
FB852	9965 000 42268	220Ω at 100MHz 0805	C158	9965 000 43980	100nF 20% 25V 0603	C281	9965 000 42403	10μF 25V 20% 1210
FB853	9965 000 42268	220Ω at 100MHz 0805	C159	9965 000 42235	47μF 25V 6.3X5.3mm	C281	9965 100 08198	10uF 10V 0805
TU201	9965 000 44034	Tuner FQD1236/F	C159	9965 100 03679	47uF 16V	C282	9965 000 42228	100nF 16V X7R 0603
TU202	9965 100 02821	TDQ4-507A	C159	9965 100 03680	47uF 16V	C283	9965 000 42228	100nF 16V X7R 0603
X350	9965 000 44602	Crystal 27Mhz	C159	9965 100 03697	47uF 25V	C284	9965 000 42228	100nF 16V X7R 0603
X350	9965 100 03224	Crystal 27Mhz	C159	9965 100 05108	47uF 25V	C285	9965 000 42228	100nF 16V X7R 0603
X350	9965 100 03536	Crystal 27Mhz	C159	9965 100 08199	47uF 16V	C286	9965 000 42228	100nF 16V X7R 0603
X350	9965 100 05116	Crystal / Osc 27MHz	C160	9965 000 43980	100nF 20% 25V 0603	C301	9965 000 45205	10uF 10V 0805
X350	9965 100 05117	Crystal / Osc 27MHz	C161	9965 000 43994	10μF 16V	C302	9965 000 42400	1μF 10V Y5V 20% 0603
ZD151	9965 000 44008	BZX284-C12	C162	9965 000 42235	47μF 25V 6.3X5.3mm	C303	9965 100 03678	100nF 10% 16V
ZD151	9965 100 02872	BZX284-C12	C162	9965 100 03679	47uF 16V	C304	9965 100 03678	100nF 10% 16V
ZD701	9965 000 44006	PD224B SOD-323	C162	9965 100 03680	47uF 16V	C305	9965 100 03678	100nF 10% 16V
ZD701	9965 100 02873	PD224B	C162	9965 100 03697	47uF 25V	C306	9965 100 03678	100nF 10% 16V
ZD706	9965 000 44006	PD224B SOD-323	C162	9965 100 05108	47uF 25V	C307	9965 100 03678	100nF 10% 16V
ZD902	9965 000 43434	P6KE120A DO-15	C162	9965 100 08199	47uF 16V	C308	9965 100 03678	100nF 10% 16V
ZD904	9965 000 43426	Trans Suppr 120V 5W	C163	9965 000 43994	10μF 16V	C309	9965 100 03678	100nF 10% 16V
ZD906	9965 000 44652	P4KE250A	C164	9965 000 43980	100nF 20% 25V 0603	C310	9965 100 03678	100nF 10% 16V
ZD908	9965 000 43427	BZX79-B18 A	C165	9965 000 42235	47μF 25V 6.3X5.3mm	C311	9965 100 03678	100nF 10% 16V
ZD908	9965 000 43430	BZX55-B18 A	C165	9965 100 03679	47uF 16V	C312	9965 000 45205	10uF 10V 0805
— —			C165	9965 100 03680	47uF 16V	C313	9965 000 42400	1μF 10V Y5V 20% 0603
			C165	9965 100 03697	47uF 25V	C314	9965 100 03678	100nF 10% 16V
			C165	9965 100 05108	47uF 25V	C315	9965 100 03678	100nF 10% 16V
			C165	9965 100 08199	47uF 16V	C316	9965 100 03678	100nF 10% 16V
C100	9965 000 43488	100nF 25V 0603	C166	9965 000 43980	100nF 20% 25V 0603	C317	9965 100 03678	100nF 10% 16V
C100	9965 000 43980	100nF 20% 25V 0603	C167	9965 000 42235	47μF 25V 6.3X5.3mm	C318	9965 100 03678	100nF 10% 16V
C101	9965 000 43981	3.9nF 1% 50V 0603	C167	9965 100 03697	47uF 25V	C319	9965 100 03678	100nF 10% 16V
C102	9965 000 43979	1nF 5% 50V 0603	C167	9965 100 05108	47uF 25V	C320	9965 100 03678	100nF 10% 16V
C103	9965 000 43979	1nF 5% 50V 0603	C201	9965 000 42228	100nF 16V X7R 0603	C321	9965 100 03678	100nF 10% 16V
C104	9965 000 42259	100pF 50V 0603	C202	9965 000 37776	100μF 25V	C322	9965 100 03678	100nF 10% 16V
C105	9965 000 43980	100nF 20% 25V 0603	C202	9965 000 43645	100μF 25V	C323	9965 000 45205	10uF 10V 0805
C106	9965 000 42259	100pF 50V 0603	C202	9965 100 08191	100uF 16V	C324	9965 000 42400	1μF 10V Y5V 20% 0603
C107	9965 000 43488	100nF 25V 0603	C202	9965 100 08192	100uF 16V	C325	9965 100 03678	100nF 10% 16V
C107	9965 000 43980	100nF 20% 25V 0603	C203	9965 000 37776	100μF 25V	C326	9965 100 03678	100nF 10% 16V
C108	9965 000 35998	220uF 16V	C203	9965 000 43645	100μF 25V	C327	9965 100 03678	100nF 10% 16V
C108	9965 000 42605	470μF 25V EB 10X13mm	C204	9965 000 42673	10nF 50V Y5V 20% 0603	C328	9965 100 03678	100nF 10% 16V
C108	9965 000 43915	470μF 25V	C205	9965 000 42403	10μF 25V 20% 1210	C329	9965 100 03678	100nF 10% 16V
C108	9965 000 43916	470μF 20% 25V	C205	9965 100 08198	10uF 10V 0805	C330	9965 100 03678	100nF 10% 16V
C109	9965 000 43488	100nF 25V 0603	C206	9965 000 42228	100nF 16V X7R 0603	C331	9965 100 03678	100nF 10% 16V
C109	9965 000 43980	100nF 20% 25V 0603	C207	9965 000 42232	47nF 16V X7R 0603	C332	9965 100 03678	100nF 10% 16V
C110	9965 000 42402	1mF 20% 25V 0805	C208	9965 000 42678	15pF -5% 50V 0603	C333	9965 100 03678	100nF 10% 16V
C111	9965 000 43488	100nF 25V 0603	C209	9965 000 42678	15pF -5% 50V 0603	C334	9965 000 45205	10uF 10V 0805
C111	9965 000 43980	100nF 20% 25V 0603	C210	9965 000 42690	47pF 50V NPO 5% 0603	C335	9965 000 42400	1μF 10V Y5V 20% 0603
C112	9965 000 43985	1μF 20% 16V	C211	9965 000 42235	47μF 25V 6.3X5.3mm	C336	9965 100 03678	100nF 10% 16V
C113	9965 100 03676	220uF 25V	C211	9965 100 03679	47uF 16V	C337	9965 100 03678	100nF 10% 16V
C114	9965 000 43981	3.9nF 1% 50V 0603	C211	9965 100 03680	47uF 16V	C338	9965 100 03678	100nF 10% 16V
C116	9965 000 43488	100nF 25V 0603	C211	9965 100 03697	47uF 25V	C339	9965 100 03678	100nF 10% 16V
C116	9965 000 43980	100nF 20% 25V 0603	C211	9965 100 05108	47uF 25V	C340	9965 100 03678	100nF 10% 16V
C117	9965 000 43980	100nF 20% 25V 0603	C211	9965 100 08199	47uF 16V	C341	9965 100 03678	100nF 10% 16V
C118	9965 000 43979	1nF 5% 50V 0603	C212	9965 000 43984	5.6pF 50V 0603	C342	9	

C349	9965 100 03678	100nF 10% 16V	C430	9965 100 03680	47uF 16V	C532	9965 000 42228	100nF 16V X7R 0603
C350	9965 000 42228	100nF 16V X7R 0603	C430	9965 100 03697	47uF 25V	C533	9965 000 42228	100nF 16V X7R 0603
C351	9965 000 44022	10µF 10% 16V	C430	9965 100 05108	47uF 25V	C534	9965 000 42228	100nF 16V X7R 0603
C351	9965 000 44023	10µF 10% 10V	C430	9965 100 08199	47uF 16V	C535	9965 000 42228	100nF 16V X7R 0603
C351	9965 000 44024	10µF 10% 10V	C431	9965 000 42228	100nF 16V X7R 0603	C536	9965 000 42228	100nF 16V X7R 0603
C351	9965 000 44596	22uF -10% 10V 1210	C432	9965 000 42228	100nF 16V X7R 0603	C537	9965 000 42228	100nF 16V X7R 0603
C351	9965 000 44597	22uF 50% 16V	C433	9965 000 42228	100nF 16V X7R 0603	C538	9965 000 35998	220uF 16V
C351	9965 100 05856	10uF 16V 10% 1206	C434	9965 000 42403	10µF 25V 20% 1210	C539	9965 000 42228	100nF 16V X7R 0603
C351	9965 100 08585	10uF 10% 10V	C434	9965 100 08198	10uF 10V 0805	C540	9965 000 42228	100nF 16V X7R 0603
C353	9965 000 42228	100nF 16V X7R 0603	C435	9965 000 42228	100nF 16V X7R 0603	C541	9965 000 42228	100nF 16V X7R 0603
C354	9965 000 42228	100nF 16V X7R 0603	C436	9965 000 42228	100nF 16V X7R 0603	C542	9965 000 42228	100nF 16V X7R 0603
C355	9965 000 42260	10nF 50V X7R 0603	C437	9965 000 42228	100nF 16V X7R 0603	C543	9965 000 42228	100nF 16V X7R 0603
C356	9965 000 43977	1nF 5% 25V 0603	C438	9965 000 42228	100nF 16V X7R 0603	C544	9965 000 42228	100nF 16V X7R 0603
C357	9965 000 42690	47pF 50V NPO 5% 0603	C439	9965 000 42228	100nF 16V X7R 0603	C545	9965 000 42228	100nF 16V X7R 0603
C358	9965 000 42229	22pF 50V NPO 0603	C440	9965 000 42228	100nF 16V X7R 0603	C546	9965 000 42228	100nF 16V X7R 0603
C359	9965 000 42403	10µF 25V 20% 1210	C441	9965 000 42228	100nF 16V X7R 0603	C547	9965 000 42228	100nF 16V X7R 0603
C359	9965 100 08198	10uF 10V 0805	C442	9965 000 42228	100nF 16V X7R 0603	C548	9965 000 42228	100nF 16V X7R 0603
C360	9965 000 42403	10µF 25V 20% 1210	C443	9965 000 44016	10µF 10% 16V	C549	9965 000 42228	100nF 16V X7R 0603
C360	9965 100 08198	10uF 10V 0805	C443	9965 000 44017	10µF 20% 16V	C550	9965 000 42228	100nF 16V X7R 0603
C361	9965 000 42228	100nF 16V X7R 0603	C443	9965 000 44019	CER 10U 10V X7R 10%	C551	9965 000 42228	100nF 16V X7R 0603
C362	9965 000 43978	10pF 5% 50V 0603	C443	9965 000 44020	10µF 10% 10V	C552	9965 000 42228	100nF 16V X7R 0603
C364	9965 000 42673	10nF 50V Y5V 20% 0603	C443	9965 000 45057	10µF 10% 16V	C553	9965 000 42228	100nF 16V X7R 0603
C365	9965 000 42673	10nF 50V Y5V 20% 0603	C444	9965 000 42228	100nF 16V X7R 0603	C554	9965 000 42228	100nF 16V X7R 0603
C366	9965 000 42260	10nF 50V X7R 0603	C445	9965 000 42228	100nF 16V X7R 0603	C555	9965 000 42228	100nF 16V X7R 0603
C367	9965 000 42260	10nF 50V X7R 0603	C446	9965 000 42228	100nF 16V X7R 0603	C556	9965 000 42228	100nF 16V X7R 0603
C368	9965 000 42260	10nF 50V X7R 0603	C447	9965 000 42228	100nF 16V X7R 0603	C557	9965 000 42228	100nF 16V X7R 0603
C371	9965 000 42673	10nF 50V Y5V 20% 0603	C448	9965 000 42228	100nF 16V X7R 0603	C558	9965 000 42228	100nF 16V X7R 0603
C375	9965 100 03678	100nF 10% 16V	C449	9965 000 42228	100nF 16V X7R 0603	C559	9965 000 42228	100nF 16V X7R 0603
C376	9965 100 03678	100nF 10% 16V	C450	9965 000 44016	10µF 10% 16V	C560	9965 000 42228	100nF 16V X7R 0603
C377	9965 100 03678	100nF 10% 16V	C450	9965 000 44017	10µF 20% 16V	C561	9965 000 42228	100nF 16V X7R 0603
C378	9965 100 03678	100nF 10% 16V	C450	9965 000 44019	CER 10U 10V X7R 10%	C562	9965 000 42228	100nF 16V X7R 0603
C379	9965 100 03678	100nF 10% 16V	C450	9965 000 44020	10µF 10% 10V	C563	9965 000 42228	100nF 16V X7R 0603
C380	9965 100 03678	100nF 10% 16V	C450	9965 000 45057	10µF 10% 16V	C564	9965 000 42228	100nF 16V X7R 0603
C381	9965 000 42400	1µF 10V Y5V 20% 0603	C451	9965 000 42228	100nF 16V X7R 0603	C565	9965 000 42228	100nF 16V X7R 0603
C382	9965 100 03678	100nF 10% 16V	C452	9965 000 42228	100nF 16V X7R 0603	C566	9965 000 42228	100nF 16V X7R 0603
C383	9965 100 03678	100nF 10% 16V	C453	9965 000 42228	100nF 16V X7R 0603	C567	9965 000 42228	100nF 16V X7R 0603
C384	9965 100 03678	100nF 10% 16V	C454	9965 000 42228	100nF 16V X7R 0603	C568	9965 000 42228	100nF 16V X7R 0603
C385	9965 100 03678	100nF 10% 16V	C455	9965 000 42228	100nF 16V X7R 0603	C569	9965 000 42228	100nF 16V X7R 0603
C386	9965 000 42228	100nF 16V X7R 0603	C456	9965 000 42228	100nF 16V X7R 0603	C570	9965 000 42228	100nF 16V X7R 0603
C387	9965 000 42228	100nF 16V X7R 0603	C457	9965 000 42228	100nF 16V X7R 0603	C571	9965 000 42228	100nF 16V X7R 0603
C388	9965 000 42228	100nF 16V X7R 0603	C458	9965 000 42228	100nF 16V X7R 0603	C572	9965 000 42228	100nF 16V X7R 0603
C389	9965 000 42228	100nF 16V X7R 0603	C459	9965 000 42228	100nF 16V X7R 0603	C573	9965 000 42228	100nF 16V X7R 0603
C390	9965 000 42228	100nF 16V X7R 0603	C460	9965 000 42228	100nF 16V X7R 0603	C574	9965 000 42228	100nF 16V X7R 0603
C391	9965 000 42228	100nF 16V X7R 0603	C461	9965 000 44022	10µF 10% 16V	C575	9965 000 42228	100nF 16V X7R 0603
C392	9965 000 42228	100nF 16V X7R 0603	C461	9965 000 44023	10µF 10% 10V	C576	9965 000 42228	100nF 16V X7R 0603
C393	9965 000 42228	100nF 16V X7R 0603	C461	9965 000 44024	10µF 10% 10V	C577	9965 000 42228	100nF 16V X7R 0603
C394	9965 000 42228	100nF 16V X7R 0603	C461	9965 100 05856	10uF 16V 10% 1206	C578	9965 000 42228	100nF 16V X7R 0603
C395	9965 000 42228	100nF 16V X7R 0603	C462	9965 000 44022	10µF 10% 16V	C579	9965 000 42228	100nF 16V X7R 0603
C401	9965 000 42228	100nF 16V X7R 0603	C462	9965 000 44023	10µF 10% 10V	C580	9965 000 42228	100nF 16V X7R 0603
C402	9965 000 42228	100nF 16V X7R 0603	C462	9965 000 44024	10µF 10% 10V	C581	9965 000 42228	100nF 16V X7R 0603
C403	9965 000 42228	100nF 16V X7R 0603	C462	9965 100 05856	10uF 16V 10% 1206	C582	9965 000 42228	100nF 16V X7R 0603
C404	9965 000 42228	100nF 16V X7R 0603	C463	9965 000 44022	10µF 10% 16V	C583	9965 000 42228	100nF 16V X7R 0603
C405	9965 000 43988	4.7µF 10% 10V	C463	9965 000 44023	10µF 10% 10V	C584	9965 000 42228	100nF 16V X7R 0603
C405	9965 100 03698	4.7uF +/-10% 10V	C463	9965 000 44024	10µF 10% 10V	C585	9965 000 42228	100nF 16V X7R 0603
C406	9965 000 42228	100nF 16V X7R 0603	C463	9965 100 05856	10uF 16V 10% 1206	C586	9965 000 42228	100nF 16V X7R 0603
C407	9965 000 43988	4.7µF 10% 10V	C465	9965 000 44022	10µF 10% 16V	C587	9965 000 42228	100nF 16V X7R 0603
C407	9965 100 03698	4.7uF +/-10% 10V	C465	9965 000 44023	10µF 10% 10V	C588	9965 000 42228	100nF 16V X7R 0603
C408	9965 000 42228	100nF 16V X7R 0603	C465	9965 000 44024	10µF 10% 10V	C589	9965 000 42228	100nF 16V X7R 0603
C409	9965 000 42228	100nF 16V X7R 0603	C465	9965 100 05856	10uF 16V 10% 1206	C590	9965 000 42228	100nF 16V X7R 0603
C410	9965 000 42228	100nF 16V X7R 0603	C466	9965 000 42228	100nF 16V X7R 0603	C591	9965 000 35998	220uF 16V
C411	9965 000 42228	100nF 16V X7R 0603	C467	9965 000 42228	100nF 16V X7R 0603	C592	9965 000 42228	100nF 16V X7R 0603
C412	9965 000 42228	100nF 16V X7R 0603	C470	9965 000 42228	100nF 16V X7R 0603	C593	9965 000 42228	100nF 16V X7R 0603
C413	9965 000 43916	470µF 20% 25V	C501	9965 000 42228	100nF 16V X7R 0603	C594	9965 000 42228	100nF 16V X7R 0603
C413	9965 100 08191	100uF 16V	C503	9965 000 35998	220uF 16V	C595	9965 000 42228	100nF 16V X7R 0603
C413	9965 100 08192	100uF 16V	C504	9965 000 42228	100nF 16V X7R 0603	C596	9965 000 42228	100nF 16V X7R 0603
C414	9965 000 43988	4.7µF 10% 10V	C505	9965 000 42228	100nF 16V X7R 0603	C597	9965 000 42228	100nF 16V X7R 0603
C414	9965 100 03698	4.7uF +/-10% 10V	C506	9965 000 42228	100nF 16V X7R 0603	C598	9965 000 42228	100nF 16V X7R 0603
C415	9965 000 42228	100nF 16V X7R 0603	C507	9965 100 03679	47uF 16V	C599	9965 000 42228	100nF 16V X7R 0603
C416	9965 000 42228	100nF 16V X7R 0603	C507	9965 100 03680	47uF 16V	C602	9965 000 42678	15pF -5% 50V 0603
C417	9965 000 43988	4.7µF 10% 10V	C507	9965 100 08199	47uF 16V	C604	9965 000 42678	15pF -5% 50V 0603
C417	9965 100 03698	4.7uF +/-10% 10V	C508	9965 000 42228	100nF 16V X7R 0603	C605	9965 000 42231	330pF 50V NPO 0603
C418	9965 000 42228	100nF 16V X7R 0603	C509	9965 000 42228	100nF 16V X7R 0603	C606	9965 000 43977	1nF 5% 25V 0603
C419	9965 000 42228	100nF 16V X7R 0603	C510	9965 000 42228	100nF 16V X7R 0603	C607	9965 000 42678	15pF -5% 50V 0603
C420	9965 000 42228	100nF 16V X7R 0603	C511	9965 000 42228	100nF 16V X7R 0603	C608	9965 000 42231	330pF 50V NPO 0603
C421	9965 000 42228	100nF 16V X7R 0603	C512	9965 000 42228	100nF 16V X7R 0603	C609	9965 000 42260	10nF 50V X7R 0603
C422	9965 000 44016	10µF 10% 16V	C513	9965 000 42228	100nF 16V X7R 0603	C610	9965 000 42260	10nF 50V X7R 0603
C422	9965 000 44017	10µF 20% 16V	C514	9965 000 42228	100nF 16V X7R 0603	C611	9965 000 42260	10nF 50V X7R 0603
C422	9965 000 44019	CER 10U 10V X7R 10%	C515	9965 000 42228	100nF 16V X7R 0603	C612	9965 000 42260	10nF 50V X7R 0603
C422	9965 000 44020	10µF 10% 10V	C516	9965 000 42228	100nF 16V X7R 0603	C613	9965 000 42260	10nF 50V X7R 0603
C422	9965 000 45057	10uF 10% 16V	C517	9965 000 42228	100nF 16V X7R 0603	C614	9965 000 42260	10nF 50V X7R 0603
C423	9965 000 42228	100nF 16V X7R 0603	C518	9965 000 42228	100nF 16V X7R 0603	C616	9965 000 42231	330pF 50V NPO 0603
C424	9965 000 42228	100nF 16V X7R 0603	C519	9965 000 42228	100nF 16V X7R 0603	C617	9965 000 42231	330pF 50V NPO 0603
C425	9965 000 42228	100nF 16V X7R 0603	C520	9965 000 42228	100nF 16V X7R 0603	C635	9965	

C649	9965 000 42231	330pF 50V NPO 0603	C777	9965 000 42403	10µF 25V 20% 1210	R113	9965 000 43962	39kΩ 5% 1/10W
C650	9965 000 42231	330pF 50V NPO 0603	C777	9965 100 08198	10uF 10V 0805	R114	9965 000 43487	3.3kΩ 5% 1/10W
C660	9965 000 42228	100nF 16V X7R 0603	C778	9965 000 42228	100nF 16V X7R 0603	R115	9965 000 43487	3.3kΩ 5% 1/10W
C661	9965 000 42231	330pF 50V NPO 0603	C779	9965 000 42403	10µF 25V 20% 1210	R116	9965 000 40053	1KΩ 1/10W 5%
C662	9965 000 43983	47nF 20 50V	C779	9965 100 08198	10uF 10V 0805	R117	9965 000 42220	22kΩ 5% 1/10W
C663	9965 000 42690	47pF 50V NPO 5% 0603	C780	9965 000 42403	10µF 25V 20% 1210	R117	9965 000 42669	6.8kΩ 5% 1/10W
C664	9965 000 43983	47nF 20 50V	C780	9965 100 08198	10uF 10V 0805	R118	9965 000 42656	10Ω 5% 1/10W
C665	9965 000 42690	47pF 50V NPO 5% 0603	C781	9965 000 42403	10µF 25V 20% 1210	R119	9965 000 42669	6.8kΩ 5% 1/10W
C666	9965 000 42231	330pF 50V NPO 0603	C781	9965 100 08198	10uF 10V 0805	R120	9965 000 43955	1kΩ 1% 1/10W
C667	9965 000 42231	330pF 50V NPO 0603	C782	9965 000 42228	100nF 16V X7R 0603	R121	9965 000 43961	3.9kΩ 5% 1/10W
C668	9965 000 43983	47nF 20 50V	C783	9965 000 42401	220pF NPO 50V 5% 0603	R122	9965 000 43955	1kΩ 1% 1/10W
C669	9965 000 42690	47pF 50V NPO 5% 0603	C784	9965 000 42403	10µF 25V 20% 1210	R123	9965 000 43959	240Ω 1% 1/10W
C670	9965 000 42231	330pF 50V NPO 0603	C784	9965 100 08198	10uF 10V 0805	R124	9965 000 43975	560Ω 1% 1/8W
C671	9965 000 42231	330pF 50V NPO 0603	C789	9965 000 43992	220µF	R125	9965 000 42221	27kΩ 5% 1/10W
C672	9965 000 43983	47nF 20 50V	C789	9965 000 43993	220µF 10V	R126	9965 000 43965	470Ω 1% 1/10W
C673	9965 000 43983	47nF 20 50V	C790	9965 000 43992	220µF	R127	9965 000 42214	10kΩ 5% 1/10W
C674	9965 000 43983	47nF 20 50V	C790	9965 000 43993	220µF 10V	R128	9965 000 42220	22kΩ 5% 1/10W
C675	9965 000 42673	10nF 50V Y5V 20% 0603	C800	9965 000 43913	470µF 35V	R129	9965 000 42218	220Ω 5% 1/10W
C676	9965 000 42673	10nF 50V Y5V 20% 0603	C800	9965 000 43914	470µF 35V	R130	9965 000 42220	22kΩ 5% 1/10W
C700	9965 000 42228	100nF 16V X7R 0603	C800	9965 100 08195	100uF 35V	R131	9965 000 42214	10kΩ 5% 1/10W
C701	9965 000 42228	100nF 16V X7R 0603	C800	9965 100 08196	100µF 35V	R132	9965 000 42218	220Ω 5% 1/10W
C702	9965 000 42228	100nF 16V X7R 0603	C800	9965 100 08197	100µF 35V	R133	9965 000 42669	6.8kΩ 5% 1/10W
C703	9965 000 42228	100nF 16V X7R 0603	C801	9965 000 43913	470µF 35V	R134	9965 000 43969	750Ω 1% 1/10W
C704	9965 000 42228	100nF 16V X7R 0603	C801	9965 000 43914	470µF 35V	R135	9965 000 42669	6.8kΩ 5% 1/10W
C705	9965 000 42228	100nF 16V X7R 0603	C802	9965 000 43989	470nF 20% 50V	R136	9965 000 43487	3.3kΩ 5% 1/10W
C706	9965 000 42228	100nF 16V X7R 0603	C803	9965 000 42262	100nF 50V Y5V 0603	R137	9965 000 42220	22kΩ 5% 1/10W
C707	9965 000 42228	100nF 16V X7R 0603	C804	9965 000 42262	100nF 50V Y5V 0603	R138	9965 000 43966	4.7Ω 5% 1/10W
C708	9965 000 42673	10nF 50V Y5V 20% 0603	C805	9965 000 43986	15nF 1% 50V	R139	9965 000 42656	10Ω 5% 1/10W
C709	9965 000 42673	10nF 50V Y5V 20% 0603	C806	9965 000 42262	100nF 50V Y5V 0603	R140	9965 000 43957	2.2Ω 5% 1/10W
C710	9965 000 42228	100nF 16V X7R 0603	C807	9965 000 42604	470µF 25V	R141	9965 000 42656	10Ω 5% 1/10W
C711	9965 000 42228	100nF 16V X7R 0603	C807	9965 000 42605	470µF 25V EB 10X13mm	R142	9965 000 40053	1KΩ 1/10W 5%
C712	9965 000 42228	100nF 16V X7R 0603	C807	9965 000 43463	1000µF 25V	R143	9965 000 43958	1.5kΩ 5% 1/10W
C713	9965 000 42228	100nF 16V X7R 0603	C808	9965 000 42262	100nF 50V Y5V 0603	R144	9965 000 42219	2.2kΩ 5% 1/10W
C714	9965 000 42228	100nF 16V X7R 0603	C809	9965 000 43982	470pF	R145	9965 000 43968	560Ω 1% 1/10W
C715	9965 000 42228	100nF 16V X7R 0603	C810	9965 000 44244	0.47µF 10%	R146	9965 000 44051	220Ω 1% 1/10W
C716	9965 000 42228	100nF 16V X7R 0603	C811	9965 000 44244	0.47µF 10%	R147	9965 000 42669	6.8kΩ 5% 1/10W
C717	9965 000 42228	100nF 16V X7R 0603	C812	9965 000 42604	470µF 25V	R148	9965 000 44051	220Ω 1% 1/10W
C718	9965 000 42228	100nF 16V X7R 0603	C812	9965 000 42605	470µF 25V EB 10X13mm	R149	9965 000 43975	560Ω 1% 1/8W
C719	9965 000 42228	100nF 16V X7R 0603	C812	9965 000 43463	1000µF 25V	R155	9965 000 42284	0Ω 1/10W
C720	9965 000 42235	47µF 25V 6.3X5.3mm	C813	9965 000 42262	100nF 50V Y5V 0603	R156	9965 000 42220	22kΩ 5% 1/10W
C720	9965 100 03679	47uF 16V	C814	9965 000 42262	100nF 50V Y5V 0603	R157	9965 000 42220	22kΩ 5% 1/10W
C720	9965 100 03680	47uF 16V	C815	9965 000 43986	15nF 1% 50V	R158	9965 000 42213	100Ω 5% 1/10W
C720	9965 100 03697	47uF 25V	C816	9965 000 43985	1µF 20% 16V	R159	9965 000 42214	100Ω 5% 1/10W
C720	9965 100 05108	47uF 25V	C817	9965 000 43985	1µF 20% 16V	R160	9965 000 43954	120Ω 1% 1/10W
C720	9965 100 08199	47uF 16V	C818	9965 000 43987	470nF 20% 16V	R161	9965 000 43960	24Ω 1% 1/10W
C721	9965 000 43488	100nF 25V 0603	C819	9965 000 42262	100nF 50V Y5V 0603	R162	9965 000 43954	120Ω 1% 1/10W
C725	9965 000 42228	100nF 16V X7R 0603	C820	9965 000 42262	100nF 50V Y5V 0603	R163	9965 000 43974	1Ω 5% 1/8W
C726	9965 000 43977	1nF 5% 25V 0603	C821	9965 000 42235	47µF 25V 6.3X5.3mm	R164	9965 000 42214	10kΩ 5% 1/10W
C727	9965 000 42673	10nF 50V Y5V 20% 0603	R172	9965 100 03697	47uF 25V	R172	9965 000 40053	1KΩ 1/10W 5%
C728	9965 000 43980	100nF 20% 25V 0603	C821	9965 100 05108	47uF 25V	R174	9965 000 42225	4.7kΩ 5% 1/10W
C729	9965 000 42693	5pF 50V NPO 0603	C822	9965 000 42262	100nF 50V Y5V 0603	R201	9965 000 42213	100Ω 5% 1/10W
C730	9965 000 42673	10nF 50V Y5V 20% 0603	C823	9965 000 43985	1µF 20% 16V	R202	9965 000 42225	4.7kΩ 5% 1/10W
C731	9965 000 42673	10nF 50V Y5V 20% 0603	C824	9965 000 43985	1µF 20% 16V	R205	9965 000 42212	0Ω 5% 1/10W
C732	9965 000 42693	5pF 50V NPO 0603	C825	9965 000 42231	330pF 50V NPO 0603	R206	9965 000 42212	0Ω 5% 1/10W
C733	9965 000 42673	10nF 50V Y5V 20% 0603	C826	9965 000 42231	330pF 50V NPO 0603	R207	9965 000 43336	75Ω 5% 1/10W
C734	9965 000 42673	10nF 50V Y5V 20% 0603	C827	9965 000 42262	100nF 50V Y5V 0603	R208	9965 000 42214	10kΩ 5% 1/10W
C735	9965 000 42231	330pF 50V NPO 0603	C828	9965 000 43982	470pF	R209	9965 000 42214	10kΩ 5% 1/10W
C736	9965 000 42231	330pF 50V NPO 0603	C829	9965 000 42262	100nF 50V Y5V 0603	R210	9965 000 42225	4.7kΩ 5% 1/10W
C737	9965 000 42693	5pF 50V NPO 0603	C830	9965 100 03676	220uF 25V	R211	9965 000 42225	4.7kΩ 5% 1/10W
C738	9965 000 42673	10nF 50V Y5V 20% 0603	C850	9965 000 42228	100nF 16V X7R 0603	R212	9965 000 42212	0Ω 5% 1/10W
C739	9965 000 42231	330pF 50V NPO 0603	C851	9965 000 42698	10µF 16V 20% 1206	R213	9965 000 42225	4.7kΩ 5% 1/10W
C740	9965 000 42231	330pF 50V NPO 0603	C851	9965 100 08198	10uF 10V 0805	R214	9965 000 43962	39kΩ 5% 1/10W
C741	9965 000 42229	22pF 50V NPO 0603	CN100	9965 100 03429	Connector	R215	9965 000 43962	39kΩ 5% 1/10W
C742	9965 000 42693	5pF 50V NPO 0603	CN601	9965 000 43922	RCA Jack g/b/r g/b/r	R217	9965 000 42219	2.2kΩ 5% 1/10W
C760	9965 000 42228	100nF 16V X7R 0603	CN601	9965 000 43925	RCA Jack g/b/r g/b/r	R219	9965 000 42215	100kΩ 5% 1/10W
C761	9965 000 42403	10µF 25V 20% 1210	CN640	9965 000 42612	RCA Jack	R220	9965 000 44038	220kΩ 5% 1/10W
C761	9965 100 08198	10uF 10V 0805	CN640	9965 000 43921	RCA Jack w/r w/r 2pj	R221	9965 000 42220	22kΩ 5% 1/10W
C762	9965 000 42403	10µF 25V 20% 1210	CN660	9965 000 43920	RCA Jack 1p Bk	R222	9965 100 02779	4.7kΩ 1% 0.1W
C762	9965 100 08198	10uF 10V 0805	CN660	9965 000 44598	RCA JACK 1p BL	R223	9965 000 42212	0Ω 5% 1/10W
C763	9965 000 42228	100nF 16V X7R 0603	CN661	9965 000 43923	RCA Jack Wh/Ye/Rd	R224	9965 000 42220	22kΩ 5% 1/10W
C764	9965 000 42228	100nF 16V X7R 0603	CN661	9965 000 43924	RCA Jack Wh/Ye/Rd	R225	9965 000 43912	1.2Ω 5% 2W
C765	9965 000 42228	100nF 16V X7R 0603	CN726	9965 000 43927	DB15 Right Angle f	R225	9965 100 03681	1.2Ohm 5% 2W
C766	9965 000 42403	10µF 25V 20% 1210	CN726	9965 000 43928	D-SUB Conn 15p f	R250	9965 000 44050	1.1kΩ 5% 1/10W
C766	9965 100 08198	10uF 10V 0805	CN727	9965 000 43926	Phone Jack 3.5MM 3p	R251	9965 000 42225	4.7kΩ 5% 1/10W
C767	9965 000 42403	10µF 25V 20% 1210	CN850	9965 000 44323	Conn. 2*20p m	R252	9965 000 42225	4.7kΩ 5% 1/10W
C767	9965 100 08198	10uF 10V 0805	CON700	9965 100 05953	HDMI Header 19p	R253	9965 000 42225	4.7kΩ 5% 1/10W
C768	9965 000 42403	10µF 25V 20% 1210	CON701	9965 100 05953	HDMI Header 19p	R254	9965 000 42222	33Ω 5% 1/10W
C768	9965 100 08198	10uF 10V 0805				R255	9965 000 42222	33Ω 5% 1/10W
C769	9965 000 42403	10µF 25V 20% 1210				R256	9965 000 42222	33Ω 5% 1/10W
C769	9965 100 08198	10uF 10V 0805				R257	9965 000 42222	33Ω 5% 1/10W
C770	9965 000 42403	10µF 25V 20% 1210				R258	9965 000 42222	33Ω 5% 1/10W
C770	9965 100 08198	10uF 10V 0805				R259	9965 000 42222	33Ω 5% 1/10W
C771	9965 000 42403	10µF 25V 20% 1210				R260	9965 000 42222	33Ω 5% 1/10W
C771	9965 100 08198	10uF 10V 0805				R261	9965 000 42222	33Ω 5% 1/10W
C772	9965 000 42403	10µF 25V 20% 1210				R262	9965 000 42216	1MΩ 5% 1/10W
C772	9965 100 08198	10uF 10V 0805				R263	9965 000 42222	33Ω 5% 1/10W
C773	9965 000 42403	10µF 25V 20% 1210				R264	9965 000 42222	33Ω 5% 1/10W
C773	9965 100 08198	10uF 10V 0805				R265	9965 000 42222	33Ω 5% 1/10W
C774	9965 000 42403	10µF 25V 20% 1210				R266	9965 000 42222	33Ω 5% 1/10W
C774	9965 100 08198	10u						

R351	9965 000 42214	10kΩ 5% 1/10W	R611	9965 000 42226	68Ω 5% 1/10W	R745	9965 000 43967	510Ω 5% 1/10W
R352	9965 000 42214	10kΩ 5% 1/10W	R612	9965 000 42213	100Ω 5% 1/10W	R746	9965 000 42214	10kΩ 5% 1/10W
R353	9965 000 42214	10kΩ 5% 1/10W	R613	9965 000 42226	68Ω 5% 1/10W	R748	9965 000 43956	2kΩ 5% 1/10W
R354	9965 000 42214	10kΩ 5% 1/10W	R614	9965 000 42213	100Ω 5% 1/10W	R749	9965 000 42213	100Ω 5% 1/10W
R355	9965 000 42214	10kΩ 5% 1/10W	R616	9965 000 42221	27kΩ 5% 1/10W	R750	9965 000 42225	4.7kΩ 5% 1/10W
R356	9965 000 42214	10kΩ 5% 1/10W	R617	9965 000 42221	27kΩ 5% 1/10W	R751	9965 000 42214	10kΩ 5% 1/10W
R357	9965 000 42214	10kΩ 5% 1/10W	R635	9965 000 43336	75Ω 5% 1/10W	R753	9965 000 42222	33Ω 5% 1/10W
R358	9965 000 42214	10kΩ 5% 1/10W	R636	9965 000 43336	75Ω 5% 1/10W	R754	9965 000 42213	100Ω 5% 1/10W
R359	9965 000 42212	0Ω 5% 1/10W	R637	9965 000 43336	75Ω 5% 1/10W	R760	9965 000 42214	10kΩ 5% 1/10W
R362	9965 000 42224	470Ω 5% 1/10W	R639	9965 000 40053	1KΩ 1/10W 5%	R761	9965 000 42213	100Ω 5% 1/10W
R363	9965 000 42222	33Ω 5% 1/10W	R640	9965 000 40053	1KΩ 1/10W 5%	R762	9965 000 42214	10kΩ 5% 1/10W
R364	9965 000 42218	220Ω 5% 1/10W	R641	9965 000 42226	68Ω 5% 1/10W	R763	9965 000 42214	10kΩ 5% 1/10W
R365	9965 000 42222	33Ω 5% 1/10W	R642	9965 000 42226	68Ω 5% 1/10W	R764	9965 000 42214	10kΩ 5% 1/10W
R366	9965 000 42277	47kΩ 5% 1/10W	R643	9965 000 42213	100Ω 5% 1/10W	R765	9965 000 42225	4.7kΩ 5% 1/10W
R367	9965 000 42214	10kΩ 5% 1/10W	R644	9965 000 42226	68Ω 5% 1/10W	R766	9965 000 42225	4.7kΩ 5% 1/10W
R368	9965 000 42214	10kΩ 5% 1/10W	R645	9965 000 42213	100Ω 5% 1/10W	R767	9965 000 42214	10kΩ 5% 1/10W
R369	9965 000 43972	8.2kΩ 5% 1/10W	R646	9965 000 42226	68Ω 5% 1/10W	R768	9965 000 42214	10kΩ 5% 1/10W
R370	9965 000 42213	100Ω 5% 1/10W	R647	9965 000 42213	100Ω 5% 1/10W	R769	9965 000 42214	10kΩ 5% 1/10W
R371	9965 000 42214	10kΩ 5% 1/10W	R649	9965 000 42221	27kΩ 5% 1/10W	R770	9965 000 42214	10kΩ 5% 1/10W
R372	9965 000 42213	100Ω 5% 1/10W	R650	9965 000 42221	27kΩ 5% 1/10W	R771	9965 000 42214	10kΩ 5% 1/10W
R373	9965 000 42666	51Ω 5% 1/10W	R661	9965 000 42213	100Ω 5% 1/10W	R772	9965 000 42214	10kΩ 5% 1/10W
R374	9965 000 42225	4.7kΩ 5% 1/10W	R663	9965 000 43336	75Ω 5% 1/10W	R773	9965 000 42222	33Ω 5% 1/10W
R375	9965 000 42225	4.7kΩ 5% 1/10W	R664	9965 000 42213	100Ω 5% 1/10W	R774	9965 000 42222	33Ω 5% 1/10W
R377	9965 000 42214	10kΩ 5% 1/10W	R665	9965 000 43336	75Ω 5% 1/10W	R775	9965 000 42222	33Ω 5% 1/10W
R378	9965 000 42218	220Ω 5% 1/10W	R666	9965 000 42213	100Ω 5% 1/10W	R776	9965 000 42222	33Ω 5% 1/10W
R379	9965 000 42225	4.7kΩ 5% 1/10W	R667	9965 000 43336	75Ω 5% 1/10W	R777	9965 000 42222	33Ω 5% 1/10W
R380	9965 000 42213	100Ω 5% 1/10W	R668	9965 000 42213	100Ω 5% 1/10W	R778	9965 000 42222	33Ω 5% 1/10W
R381	9965 000 42213	100Ω 5% 1/10W	R669	9965 000 40053	1KΩ 1/10W 5%	R779	9965 000 42222	33Ω 5% 1/10W
R382	9965 000 42213	100Ω 5% 1/10W	R670	9965 000 42221	27kΩ 5% 1/10W	R780	9965 000 44599	5kΩ 1% 0.1W
R383	9965 000 42225	4.7kΩ 5% 1/10W	R671	9965 000 40053	1KΩ 1/10W 5%	R781	9965 000 42222	33Ω 5% 1/10W
R384	9965 000 42225	4.7kΩ 5% 1/10W	R672	9965 000 42221	27kΩ 5% 1/10W	R782	9965 000 44599	5kΩ 1% 0.1W
R385	9965 000 42213	100Ω 5% 1/10W	R673	9965 000 42225	4.7kΩ 5% 1/10W	R785	9965 000 42225	4.7kΩ 5% 1/10W
R386	9965 000 42213	100Ω 5% 1/10W	R674	9965 000 42213	100Ω 5% 1/10W	R786	9965 000 42277	47kΩ 5% 1/10W
R387	9965 000 42213	100Ω 5% 1/10W	R675	9965 000 42213	100Ω 5% 1/10W	R787	9965 000 42277	47kΩ 5% 1/10W
R388	9965 100 02777	22k Ωhm 1% 0.1W	R676	9965 000 42213	100Ω 5% 1/10W	R788	9965 000 42212	0Ω 5% 1/10W
R390	9965 000 42225	4.7kΩ 5% 1/10W	R677	9965 000 42225	4.7kΩ 5% 1/10W	R789	9965 000 42212	0Ω 5% 1/10W
R391	9965 000 42225	4.7kΩ 5% 1/10W	R678	9965 000 42213	100Ω 5% 1/10W	R790	9965 000 43970	7.5kΩ 5% 1/10W
R392	9965 000 42225	4.7kΩ 5% 1/10W	R685	9965 000 42225	4.7kΩ 5% 1/10W	R791	9965 000 43970	7.5kΩ 5% 1/10W
R394	9965 000 42225	4.7kΩ 5% 1/10W	R687	9965 000 42662	330Ω 5% 1/10W	R792	9965 000 42225	4.7kΩ 5% 1/10W
R395	9965 000 43961	3.9kΩ 5% 1/10W	R688	9965 000 42662	330Ω 5% 1/10W	R793	9965 000 42225	4.7kΩ 5% 1/10W
R396	9965 000 42225	4.7kΩ 5% 1/10W	R689	9965 000 42213	100Ω 5% 1/10W	R794	9965 000 44051	220Ω 1% 1/10W
R397	9965 000 42225	4.7kΩ 5% 1/10W	R690	9965 000 42213	100Ω 5% 1/10W	R795	9965 000 44051	220Ω 1% 1/10W
R398	9965 000 42225	4.7kΩ 5% 1/10W	R691	9965 000 42225	4.7kΩ 5% 1/10W	R801	9965 000 42225	4.7kΩ 5% 1/10W
R399	9965 000 42213	100Ω 5% 1/10W	R692	9965 000 42212	0Ω 5% 1/10W	R802	9965 000 42225	4.7kΩ 5% 1/10W
R400	9965 000 42213	100Ω 5% 1/10W	R693	9965 000 42212	0Ω 5% 1/10W	R803	9965 000 42225	4.7kΩ 5% 1/10W
R401	9965 000 43971	820Ω 1% 1/10W	R694	9965 000 42214	10kΩ 5% 1/10W	R804	9965 000 43962	39kΩ 5% 1/10W
R501	9965 000 42213	100Ω 5% 1/10W	R695	9965 000 42214	10kΩ 5% 1/10W	R805	9965 000 42216	1MΩ 5% 1/10W
R502	9965 000 42217	22Ω 5% 1/10W	R696	9965 000 42214	10kΩ 5% 1/10W	R806	9965 000 42220	22kΩ 5% 1/10W
R504	9965 000 42217	22Ω 5% 1/10W	R697	9965 000 42214	10kΩ 5% 1/10W	R807	9965 000 42225	4.7kΩ 5% 1/10W
R505	9965 000 42217	22Ω 5% 1/10W	R698	9965 000 42225	4.7kΩ 5% 1/10W	R808	9965 000 42216	1MΩ 5% 1/10W
R506	9965 000 42217	22Ω 5% 1/10W	R699	9965 000 42225	4.7kΩ 5% 1/10W	R809	9965 000 43973	10 ΩHM 1/10W
R507	9965 000 42217	22Ω 5% 1/10W	R700	9965 000 40053	1KΩ 1/10W 5%	R810	9965 000 42220	22kΩ 5% 1/10W
R508	9965 000 42213	100Ω 5% 1/10W	R701	9965 000 42213	100Ω 5% 1/10W	R811	9965 000 43976	10Ω 5% 1/4W
R509	9965 000 42225	4.7kΩ 5% 1/10W	R702	9965 000 42213	100Ω 5% 1/10W	R812	9965 000 43976	10Ω 5% 1/4W
R510	9965 000 42664	47Ω 5% 1/10W	R703	9965 000 42213	100Ω 5% 1/10W	R813	9965 000 42671	22Ω 5% 1/4W
R511	9965 000 42664	47Ω 5% 1/10W	R704	9965 000 42215	100kΩ 5% 1/10W	R814	9965 000 42671	22Ω 5% 1/4W
R512	9965 000 42664	47Ω 5% 1/10W	R705	9965 000 40053	1KΩ 1/10W 5%	R815	9965 000 42220	22kΩ 5% 1/10W
R513	9965 000 42664	47Ω 5% 1/10W	R706	9965 000 42212	0Ω 5% 1/10W	R816	9965 000 42214	10kΩ 5% 1/10W
R514	9965 000 42664	47Ω 5% 1/10W	R707	9965 000 42213	100Ω 5% 1/10W	R817	9965 000 42213	100Ω 5% 1/10W
R515	9965 000 42664	47Ω 5% 1/10W	R708	9965 000 42213	100Ω 5% 1/10W	R818	9965 000 42214	10kΩ 5% 1/10W
R516	9965 000 42664	47Ω 5% 1/10W	R710	9965 000 42214	10kΩ 5% 1/10W	R819	9965 000 42214	10kΩ 5% 1/10W
R517	9965 000 42664	47Ω 5% 1/10W	R711	9965 000 42214	10kΩ 5% 1/10W	R820	9965 000 44324	22KΩhm 1% 0.1W
R518	9965 000 43336	75Ω 5% 1/10W	R712	9965 000 42213	100Ω 5% 1/10W	R820	9965 100 02777	22k Ωhm 1% 0.1W
R519	9965 000 43336	75Ω 5% 1/10W	R713	9965 000 40053	1KΩ 1/10W 5%	R821	9965 000 42214	10kΩ 5% 1/10W
R520	9965 000 43336	75Ω 5% 1/10W	R714	9965 000 43964	4.64kΩ 1% 1/10W	R822	9965 000 42214	10kΩ 5% 1/10W
R521	9965 000 43336	75Ω 5% 1/10W	R715	9965 000 42225	4.7kΩ 5% 1/10W	R823	9965 000 42225	4.7kΩ 5% 1/10W
R522	9965 000 43336	75Ω 5% 1/10W	R716	9965 000 42222	33Ω 5% 1/10W	R824	9965 000 40053	1KΩ 1/10W 5%
R523	9965 000 43336	75Ω 5% 1/10W	R717	9965 000 42222	33Ω 5% 1/10W	R850	9965 000 42213	100Ω 5% 1/10W
R524	9965 000 43336	75Ω 5% 1/10W	R718	9965 000 42215	100kΩ 5% 1/10W	R850	9965 000 43490	5.6kΩ 5% 0.1W
R525	9965 000 43336	75Ω 5% 1/10W	R719	9965 000 42214	10kΩ 5% 1/10W	R852	9965 000 40053	1KΩ 1/10W 5%
R526	9965 000 42664	47Ω 5% 1/10W	R720	9965 000 42214	10kΩ 5% 1/10W	R852	9965 000 42225	4.7kΩ 5% 1/10W
R527	9965 000 42664	47Ω 5% 1/10W	R721	9965 000 42217	22Ω 5% 1/10W	R853	9965 000 42225	4.7kΩ 5% 1/10W
R528	9965 000 42664	47Ω 5% 1/10W	R722	9965 000 42217	22Ω 5% 1/10W	R855	9965 000 43956	2kΩ 5% 1/10W
R529	9965 000 42664	47Ω 5% 1/10W	R724	9965 000 40053	1KΩ 1/10W 5%	R856	9965 000 42214	10kΩ 5% 1/10W
R530	9965 000 43336	75Ω 5% 1/10W	R725	9965 000 42212	0Ω 5% 1/10W	R857	9965 000 42225	4.7kΩ 5% 1/10W
R531	9965 000 43336	75Ω 5% 1/10W	R726	9965 000 42226	68Ω 5% 1/10W	R858	9965 000 42212	0Ω 5% 1/10W
R532	9965 000 43336	75Ω 5% 1/10W	R727	9965 000 42213	100Ω 5% 1/10W	R866	9965 000 42225	4.7kΩ 5% 1/10W
R533	9965 000 43336	75Ω 5% 1/10W	R728	9965 000 42212	0Ω 5% 1/10W	RP501	9965 000 43951	22Ω 5%
R534	9965 000 42664	47Ω 5% 1/10W	R729	9965 000 42226	68Ω 5% 1/10W	RP502	9965 000 43951	22Ω 5%
R535	9965 000 42664	47Ω 5% 1/10W	R730	9965 000 43336	75Ω 5% 1/10W	RP503	9965 000 43952	47Ω 5% 1/16W
R536	9965 000 42664	47Ω 5% 1/10W	R731	9965 000 42213	100Ω 5% 1/10W	RP504	9965 000 43952	47Ω 5% 1/16W
R537	9965 000 42664	47Ω 5% 1/10W	R732	9965 000 42226	68Ω 5% 1/10W	RP505	9965 000 43951	22Ω 5%
R538	9965 000 43336	75Ω 5% 1/10W	R733	9965 000 43336	75Ω 5% 1/10W	RP506	9965 000 43953	75Ω 5% 1/16W
R539	9965 000 43336	75Ω 5% 1/10W	R734	9965 000 42213	100Ω 5% 1/10W	RP507	9965 000 43952	47Ω 5% 1/16W
R540	9965 000 43336	75Ω 5% 1/10W	R735	9965 000 42212	0Ω 5% 1/10W	RP508	9965 000 43951	22Ω 5%
R541	9965 000 43336	75Ω 5% 1/10W	R736	9965 000 42226	68Ω 5% 1/10W	RP509	9965 000 43952	47Ω 5% 1/16W
R602	9965 000 43336	75Ω 5% 1/10W	R737	9965 000 40053	1KΩ 1/10W 5%	RP510	9965 000 43951	22Ω 5%
R604	9965 000 43336	75Ω 5% 1/10W	R738	9965 000 42221	27kΩ 5% 1/10W	RP511	9965 000 43952	47Ω 5% 1/16W
R605	9965 000 40053</							

RP518	9965 000 43953	75Ω 5% 1/16W
RP519	9965 000 43953	75Ω 5% 1/16W
RP520	9965 000 43953	75Ω 5% 1/16W
RP521	9965 000 43953	75Ω 5% 1/16W
RP522	9965 000 43953	75Ω 5% 1/16W
RP523	9965 000 43953	75Ω 5% 1/16W
RP524	9965 000 43953	75Ω 5% 1/16W
RP525	9965 000 43953	75Ω 5% 1/16W
RP526	9965 000 43953	75Ω 5% 1/16W
RP527	9965 000 43952	47Ω 5% 1/16W
RP528	9965 000 43953	75Ω 5% 1/16W
RP529	9965 000 43952	47Ω 5% 1/16W
RP530	9965 000 43953	75Ω 5% 1/16W
RP531	9965 000 43952	47Ω 5% 1/16W
RP532	9965 000 43953	75Ω 5% 1/16W
RP533	9965 000 43952	47Ω 5% 1/16W
RP534	9965 000 43953	75Ω 5% 1/16W
RP535	9965 000 43952	47Ω 5% 1/16W
RP536	9965 000 43953	75Ω 5% 1/16W
RP537	9965 000 43952	47Ω 5% 1/16W
RP538	9965 000 43953	75Ω 5% 1/16W
RP539	9965 000 43952	47Ω 5% 1/16W
RP540	9965 000 43953	75Ω 5% 1/16W
RP541	9965 000 43952	47Ω 5% 1/16W
RP542	9965 000 43953	75Ω 5% 1/16W

L100	9965 000 44837	15μH 20%
L100	9965 100 03222	15uH 20% SMD
L101	9965 000 43998	10μH SLF12575T-1
L101	9965 100 02834	SLF12575T
L102	9965 000 43998	10μH SLF12575T-1
L150	9965 100 03222	15uH 20% SMD
L201	9965 000 42718	2.2μH 10% FCI160
L201	9965 100 03223	FLMA-1600808
L202	9965 000 42718	2.2μH 10% FCI160
L601	9965 000 43818	0.10μH 10%
L601	9965 100 02836	0.1 uH 10%
L601	9965 100 02837	0.1 uH 10%
L601	9965 100 02875	Ind. 0.1 uH 10%
L602	9965 000 43818	0.10μH 10%
L602	9965 100 02875	Ind. 0.1 uH 10%
L604	9965 000 43818	0.10μH 10%
L604	9965 100 02875	Ind. 0.1 uH 10%
L635	9965 000 43818	0.10μH 10%
L635	9965 100 02875	Ind. 0.1 uH 10%
L636	9965 000 43818	0.10μH 10%
L636	9965 100 02875	Ind. 0.1 uH 10%
L637	9965 000 43818	0.10μH 10%
L637	9965 100 02875	Ind. 0.1 uH 10%
L660	9965 000 43818	0.10μH 10%
L660	9965 100 02875	Ind. 0.1 uH 10%
L661	9965 000 43818	0.10μH 10%
L661	9965 100 02875	Ind. 0.1 uH 10%
L662	9965 000 43818	0.10μH 10%
L662	9965 100 02875	Ind. 0.1 uH 10%
L725	9965 000 43818	0.10μH 10%
L725	9965 100 02875	Ind. 0.1 uH 10%
L726	9965 000 43818	0.10μH 10%
L726	9965 100 02875	Ind. 0.1 uH 10%
L801	9965 000 42392	33μH 10% TSL0808
L802	9965 000 42392	33μH 10% TSL0808
L855	9965 000 43999	67Ω/400mADLW21SN67
L855	9965 000 44000	90Ω/400mA ACM2012
L855	9965 100 02838	Choke 670hm/400mA
L855	9965 100 02839	Choke 900hm/400mA
L856	9965 000 43999	67Ω/400mADLW21SN67
L856	9965 000 44000	90Ω/400mA ACM2012
L857	9965 000 43999	67Ω/400mADLW21SN67
L857	9965 000 44000	90Ω/400mA ACM2012
L858	9965 000 43999	67Ω/400mADLW21SN67
L858	9965 000 44000	90Ω/400mA ACM2012
L859	9965 000 43999	67Ω/400mADLW21SN67
L859	9965 000 44000	90Ω/400mA ACM2012
L860	9965 000 43999	67Ω/400mADLW21SN67
L860	9965 000 44000	90Ω/400mA ACM2012
L861	9965 000 43999	67Ω/400mADLW21SN67
L861	9965 000 44000	90Ω/400mA ACM2012
L862	9965 000 43999	67Ω/400mADLW21SN67
L862	9965 000 44000	90Ω/400mA ACM2012
L863	9965 000 43999	67Ω/400mADLW21SN67
L863	9965 000 44000	90Ω/400mA ACM2012
L864	9965 000 43999	67Ω/400mADLW21SN67
L864	9965 000 44000	90Ω/400mA ACM2012
L910	9965 000 44634	Coil 2.4μH 20% 4.5MΩ
L911	9965 000 44635	Coil 2.3uH 20% 7.2MΩ
L912	9965 000 43362	Line Filter 8mH 4.0A
L914	9965 100 03226	Choke 380μH 130Ω
L914	9965 100 03227	Choke 380μH 130Ω
L915	9965 000 43425	Coil 47uH 10%
T904	9965 100 02520	XFMR HJC-S6191
T905	9965 100 03228	XFMR HJC-S6192



D100	9965 000 37806	SMD
D101	9965 000 44010	BAS316
D101	9965 100 02823	BAS316
D102	9965 000 44010	BAS316
D103	9965 000 44005	PDZ18B
D103	9965 000 44009	BZX384-C18
D103	9965 100 02824	BZX384-C18
D103	9965 100 02825	PDZ18B
D104	9965 000 44004	BZX384-C5V6
D104	9965 100 02826	BZX384-C5V6 SOD-323
D104	9965 100 02827	PDZ5.6B
D104	9965 100 03271	PDZ5.6B
D151	9965 100 02829	BAV103
D151	9965 100 02830	BAV103
D151	9965 100 03272	BAV103
D350	9965 000 37405	BAS32L
D350	9965 100 02831	LL4148 GS08
D350	9965 100 03321	LL4148-GS08
D350	9965 100 03327	BAS32L
D351	9965 100 02831	LL4148 GS08
D351	9965 100 03321	LL4148-GS08
D351	9965 100 03327	BAS32L
D352	9965 100 02831	LL4148 GS08
D352	9965 100 03321	LL4148-GS08
D352	9965 100 03327	BAS32L
D401	9965 100 02831	LL4148 GS08
D401	9965 100 03321	LL4148-GS08
D401	9965 100 03327	BAS32L
D700	9965 000 44010	BAS316
D701	9965 000 44010	BAS316
D702	9965 100 02831	LL4148 GS08
D702	9965 100 03321	LL4148-GS08
D702	9965 100 03327	BAS32L
D703	9965 100 02831	LL4148 GS08
D703	9965 100 03321	LL4148-GS08
D703	9965 100 03327	BAS32L
D704	9965 100 02831	LL4148 GS08
D704	9965 100 03321	LL4148-GS08
D704	9965 100 03327	BAS32L
D705	9965 100 02831	LL4148 GS08
D705	9965 100 03321	LL4148-GS08
D705	9965 100 03327	BAS32L
D725	9965 100 02831	LL4148 GS08
D725	9965 100 03321	LL4148-GS08
D725	9965 100 03327	BAS32L
D726	9965 100 02831	LL4148 GS08
D726	9965 100 03321	LL4148-GS08
D726	9965 100 03327	BAS32L
D760	9965 000 44015	SM240A DO-214AC
D760	9965 100 02832	SM240A DO-214AC
D801	9965 100 02831	LL4148 GS08
D801	9965 100 03321	LL4148-GS08
D801	9965 100 03327	BAS32L
D802	9965 100 03327	BAS32L
D901	9965 000 43371	STTH8L06FP
D906	9965 000 39775	LL4148-GS08
D907	9965 000 40067	RG10-DO-204AL
D912	9965 000 43435	BYT42D
D912	9965 000 43436	RG10D
D918	9965 100 02529	BAV21
D922	9965 000 45028	STPS20H100CFP
D922	9965 000 45029	SP20100R
D924	9965 000 43437	UF1007 1A 1000V
D925	9965 000 43438	STTH110
D926	9965 000 43439	DIODE
D926	9965 000 43440	SBYV27-200-E3
D927	9965 000 44611	SP1060
D927	9965 100 02528	MBRF1060CT
D929	9965 000 43412	BAV103
D929	9965 000 43413	BAV103



IC902	9965 000 44633	SG6961
IC904	9965 000 43345	TEA1507P/N1
IC907	9965 000 43345	TEA1507P/N1
IC909	9965 000 40055	PC123 Y82FZ0F
IC909	9965 000 40056	TCET1103G
IC910	9965 000 40055	PC123 Y82FZ0F
IC910	9965 000 40056	TCET1103G
IC911	9965 000 40055	PC123 Y82FZ0F
IC911	9965 000 40056	TCET1103G
IC912	9965 000 43441	TL431ACZ
IC913	9965 000 43441	TL431ACZ
Q100	9965 000 37398	SI5441DC
Q101	9965 100 02840	SI4936ADY SO-8
Q102	9965 100 02840	SI4936ADY SO-8
Q103	9965 000 42648	BC847C
Q103	9965 000 42649	BC847C
Q103	9965 100 02430	BC847C SOT-323

Q104	9965 100 02842	BC817-25
Q104	9965 100 08584	45VBC817-25
Q105	9965 000 42648	BC847C
Q105	9965 000 42649	BC847C
Q106	9965 000 42648	BC847C
Q106	9965 000 42649	BC847C
Q106	9965 100 02841	BC847C
Q107	9965 100 02843	PHD38N02LT
Q107	9965 100 02844	PHD36N03LT
Q108	9965 000 37397	MUN2211J
Q108	9965 000 42211	PDTC114EK SC-59
Q113	9965 000 42648	BC847C
Q113	9965 000 42649	BC847C
Q150	9965 100 03213	SI5441DC
Q150	9965 100 05852	SI5441DC 1206-8
Q151	9965 000 42648	BC847C
Q151	9965 000 42649	BC847C
Q151	9965 100 02841	BC847C
Q153	9965 000 37397	MUN2211J
Q153	9965 000 42211	PDTC114EK SC-59
Q201	9965 000 36033	RK7002
Q201	9965 000 42651	2N7002 SOT-23
Q201	9965 100 02428	RK7002
Q202	9965 000 36033	RK7002
Q202	9965 000 42651	2N7002 SOT-23
Q203	9965 100 02845	SI3441BDV
Q351	9965 000 40045	MMBT3904
Q351	9965 100 02847	MMBT3904 200mA/40V
Q353	9965 000 40045	MMBT3904
Q700	9965 000 42648	BC847C
Q700	9965 000 42649	BC847C
Q700	9965 100 02841	BC847C
Q701	9965 000 42648	BC847C
Q701	9965 000 42649	BC847C
Q704	9965 100 02845	SI3441BDV
Q761	9965 000 43944	BC847BW 100mA/45V
Q761	9965 100 02848	BC847BW 100mA/45V
Q762	9965 000 43944	BC847BW 100mA/45V
Q801	9965 100 02849	BC857BW
Q802	9965 000 43944	BC847BW 100mA/45V
Q850	9965 000 40045	MMBT3904
Q851	9965 000 40045	MMBT3904
Q901	9965 000 43864	Mosfet STP10NK80ZFP
Q902	9965 000 45030	STW25NM60N20A/600V
Q902	9965 000 45031	FCA2060
Q908	9965 000 44636	STP7NK80ZFP ST
Q908	9965 100 02480	2SK3530-01MRSC
Q914	9965 000 37785	BC857CG
Q914	9965 000 40046	BC857 SOT23
Q916	9965 000 42649	BC847C
Q916	9965 100 02841	BC847C
BD901	9965 000 43854	DIODE GBU605
BD901	9965 000 43858	Bridge 6A/600V
BD901	9965 000 44288	GBU606
U100	9965 000 43937	TPS5430DDAR
U100	9965 100 02850	TPS5430DDAR
U101	9965 000 43942	IC NCP5422AD
U101	9965 100 02851	NCP5422AD
U102	9965 000 43929	IC TS431AIL SOT235
U102	9965 100 02852	TS431AIL
U150	9965 000 42209	AME1117CCGTZ
U150	9965 000 42624	LD1117S33 SOT-223
U150	9965 000 42747	LD1117S33 SOT-223
U151	9965 000 42209	AME1117CCGTZ
U151	9965 000 43930	LD1117DT33TR
U151	9965 100 02853	LD1117DT33TR
U152	9965 000 42209	AME1117CCGTZ
U152	9965 000 42624	LD1117S33 SOT-223
U152	9965 000 42747	LD1117S33 SOT-223
U153	9965 000 43935	AP1117ELA-ADJ
U153	9965 100 02854	LD1117S-TR
U153	9965 100 02855	AP1117ELA-ADJ
U154	9965 000 43935	AP1117ELA-ADJ
U154	9965 100 02854	LD1117S-TR
U154	9965 100 02855	AP1117ELA-ADJ
U250	9965 000 43932	IC MT5112BD TQFP-100
U250	9965 100 02856	MT5112BD
U301	9965 100 03214	MT5373AJ PBGA688
U501	9965 000 43940	HY5DU561622ETP-5
U501	9965 100 02859	HY5DU561622ETP-5
U502	9965 000 43940	HY5DU561622ETP-5
U502	9965 100 02859	HY5DU561622ETP-5
U503	9965 000 43934	IC LP2996MRX PSOP-8
U503	9965 100 02860	LP2996MRX
U504	9965 000 43940	HY5DU561622ETP-5
U504	9965 100 02859	HY5DU561622ETP-5
U505	9965 000 43940	HY5DU561622ETP-5
U505	9965 100 02859	HY5DU561622ETP-5
U700	9965 000 44049	TMDS 341APFCRG4
U700	9965 100 02861	TMDS341APFCRG4
U701	9965 000 35965	LP24C02-WMN6TP
U701	9965 000 42647	AT24C02BN-10SU-1.8
U701	9965 000 43941	M24C02-WMN6TP
U701	9965 100 08599	AT24C02BN

U702	9965 000 35965	M24C02-WMN6TP
U702	9965 000 42647	AT24C02BN-10SU-1.8
U702	9965 000 43941	M24C02-WMN6TP
U702	9965 100 08599	AT24C02BN
U703	9965 000 43938	TS5A3157DCKRE4
U703	9965 100 02862	TS5A3157DCKRE4
U703	9965 100 02863	NLASB3157DFT2G
U725	9965 000 35965	M24C02-WMN6TP
U725	9965 000 42647	AT24C02BN-10SU-1.8
U725	9965 000 43941	M24C02-WMN6TP
U725	9965 100 08599	AT24C02BN
U760	9965 000 43936	WM8776SEFT/R
U760	9965 100 02864	WM8776SEFT/R
U801	9965 000 44600	TDA8932T
U801	9965 100 02865	TDA8933T
U801	9965 100 03313	TDA8932T
Y250	9965 000 44013	Xtal 25MHz 20p HC49/S
Y250	9965 000 44014	Xtal 25MHz 20p HC49/S
Y250	9965 100 02868	Crystal 25Mhz 20pF

Side AV Panel [SA]

Various

SW0201	9965 100 02882	Tact Switch
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C0201	9965 000 43985	1μF 20% 16V
C040	9965 000 42690	47pF 50V NPO 5% 0603
C041	9965 000 42231	330pF 50V NPO 0603
C042	9965 000 42231	330pF 50V NPO 0603
C043	9965 000 42231	330pF 50V NPO 0603
C044	9965 000 42231	330pF 50V NPO 0603
C045	9965 000 42690	47pF 50V NPO 5% 0603
C046	9965 000 42690	47pF 50V NPO 5% 0603
C049	9965 000 42722	6n8 50V X7R 0603
C050	9965 000 42722	6n8 50V X7R 0603
CN041	9965 000 43811	RCA Jack 1*3 Y/W/R
CN041	9965 000 43812	RCA Jack 1*3 Y/Wh/Rd
CN042	9965 000 43813	Mini Jack 4p Bk
CN042	9965 000 43814	Mini Jack 4p
CN043	9965 000 43816	Phone Jack 3.5mm 7p Bk
CN043	9965 100 03712	Phone JACK 3.5mm bl



R0201	9965 000 42662	330Ω 5% 1/10W
R0202	9965 000 42218	220Ω 5% 1/10W
R0203	9965 000 42225	4.7kΩ 5% 1/10W
R0204	9965 000 42214	10kΩ 5% 1/10W
R0205	9965 000 42225	4.7kΩ 5% 1/10W
R0206	9965 000 42225	4.7kΩ 5% 1/10W
R040	9965 000 43336	75Ω 5% 1/10W
R041	9965 000 40053	1KΩ 1/10W 5%
R042	9965 000 42221	27kΩ 5% 1/10W
R043	9965 000 40053	1KΩ 1/10W 5%
R044	9965 000 42221	27kΩ 5% 1/10W
R045	9965 000 43336	75Ω 5% 1/10W
R046	9965 000 43336	75Ω 5% 1/10W
R047	9965 000 42212	0Ω 5% 1/10W
R048	9965 000 42212	0Ω 5% 1/10W



L040	9965 000 43818	0.10μH 10%
L040	9965 100 02875	Ind. 0.1 uH 10%
L041	9965 000 43818	0.10μH 10%
L041	9965 100 02875	Ind. 0.1 uH 10%
L042	9965 000 43818	0.10μH 10%
L042	9965 100 02875	Ind. 0.1 uH 10%
LED0201	9965 000 42729	L-3WSYKPBW



Q0201	9965 000 42649	BC847C
Q0201	9965 100 02479	BC847C
Q0202	9965 000 42649	BC847C
Q0202	9965 100 02479	BC847C
Q0203	9965 000 37785	BC857CG
Q0203	9965 000 40046	BC857 SOT23
Q0203	9965 000 43378	BC858CLG
U0201	9965 000 42727	TSOP34136SB1

11. Revision List

Manual xxxx xxx xxxx.0

- First release.

Manual xxxx xxx xxxx.1

- Model 42PFL5432D/37 added.
- Spare parts list modified.